## A Grammar of the Skou language of New Guinea

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# Draft: comments welcome! 

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## Preliminaries

## Abbreviations and Glossing conventions

The following abbreviations have been used in glosses and in the discussion of the grammar of sentences. Some of these abbreviations are only used in combination with others to gloss portmanteau morphemes, such as 3SG.NF to gloss the non-feminine, singular, third person agreement markers.

| $x / y$ | an $x$, missing values for $y$ | k.o. | kind of |
| :--- | :--- | :--- | :--- |
| 1 | first person | L | low (tone) |
| 2 | second person | N | nasalisation |
| 3 | third person | NF | non-feminine |
| A | most agent-like argument of a | NH | non-human <br> object (in word order statements) |
|  | bivalent predicate | O | obl |
| oblique |  |  |  |

$\dagger$ The terms 'subject' and 'object' are primarily used as a descriptive shorthand, and are not necessarily intended to imply any theoretical status. The label 'subject' is used as a shorthand expression to mean 'either S or A', and 'object' is used in opposition to 'subject' to refer to the same argument that is referred to as ' P ' elsewhere. The discussion in 13.3 will illuminate the theoretical use of the terms. The term 'oblique' is used as a cover for non-terms: if a nominal is neither 'subject' nor 'object', then, regardless of whether it is an argument or an adjunct it is termed 'oblique'. This collapses the distinction between subcategorised nonterms and non-subcategorised non-terms ('adjuncts'), but does so for language-
specific empirical reasons, discussed in chapters 3, 11 and 16. Both morphosyntactic coding properties, and various syntactic alternations, show a clear motivation for grouping these two classes of functions together.
In addition to the abbreviations used to gloss Skou material, there are some additional abbreviations that have been used to gloss material from other languages, where it has been used. Alamblak, Ambonese Malay, Asmat, Barupu, Dumo, Dutch, Hokkien, (Standard) Indonesian, Irish, Lani, Nyao, Oirata, Papuan Malay, Puare, Saweru and Tukang Besi all appear in this book in some guise or another to provide a comparative or typologicalperspective on the material discussed (for their respective locations in the text, see the index). The following abbreviations are used in the glosses of material from these languages, in addition to certain of the above abbreviations that are relevant:

| ACC | accusative |
| :--- | :--- |
| ACCOM | accompaniment |
| CAUS | causative |
| DET | determiner |
| DR | different reference |
| ERG | ergative |
| M | masculine |
| LOC | locative |
| NOM | nominative |


| NSG | non-singular (ie., dual or plural) |
| :--- | :--- |
| PAST | past |
| PF | perfective |
| PREP | preposition |
| PRES | present |
| POSS | possessive |
| POST | postposition |
| R | realis |

In addition to the glossing abbreviations described above, the following additional conventions are used in the glossing line to break up the morphological and sentential material:

- hyphen separates separate morphemes within the one (morphosyntactic) word
$=$ equals sign a clitic boundary between a bound clitic and (ultimately) a free form
(space) 1. a boundary between two lexically independent roots that are phrasally bound, such as between an adjunct nominal and a verb, or two verbs in a serial verb construction.

2. a clitic boundary between a bound clitic and a free form, or a base and its reduplicant, in a sentence that is presented with Skou orthographic conventions, following an earlier sentence that has used the normal glossing conventions.
(no mark) a boundary between an affix and a root or other affix in a sentence that is presented with Skou orthographic conventions
. full stop
: colon
3. separates the multiple English words that are used to gloss a monomorphemic Skou root, such as 'go.down' to gloss the monomorphemic hi, or 2 SG . DAT to gloss $=m e$.
4. separates grammatical information that has been encoded by vowel alternations or stem suppletion from the meaning of the verb root
5. a final falling intonation pattern at the end of a sentence or utterance
separates the English words necessary to gloss a complex Skou word, for which morpheme breaks have not been provided
\(\left.\begin{array}{lll}, \& comma \& a break in the intonation pattern in an utterance <br>
? \& question mark \& final rising intonation or presence of a question word in the <br>

sentence serving an interrogative function\end{array}\right]\)| separates lexically independent and structurally independent |
| :--- | :--- |
| roots |$\quad$| (tab) |  |
| :--- | :--- |

[xy ] square brackets indicates a phrasal or morphological constituent, of the sort $x y$
Punctuation conventions regarding capitalisation, etc., apply to Skou exactly as they do to English or Indonesian, except that the first person singular pronoun is not capitalised. Additionally, ungrammatical sentences are not written with punctuation (capitalisation or full stops, etc.) since they are not uttered in real language, and so are not eligible for 'real' punctuation. This is another tool that has been used to more clearly delineate the grammatical and the ungrammatical material. (Capitalisation and other punctuation is also withheld from phrasal, rather than full clausal, examples.) The different codes that have been used for different grammaticality judgements, all placed at the beginning of the sentence (except for material in brackets, which appears in the normal position associated with an argument of that syntactic role) are:

|  | (no mark) | fully grammatical sentence |
| :---: | :---: | :---: |
| * | asterisk | ungrammatical sentence |
| ?* | question, asterisk | ungrammatical sentence; though some speakers accept it to some degree, none would say it |
| !* | exclamation, asterisk | severely ungrammatical sentence (speakers strongly reject the utterance) |
| \# | hash | at best marginally grammatical sentence, though inappropriate to the context that is presented, or more likely to be phrased in a more appropriate manner; perhaps judged ungrammatical by some speakers |
| \#/* | hash + asterisk | badly infelicitous sentence, bordering on the ungrammatical |
| *(XY) | asterisk outside brackets | the sentence is ungrammatical unless the material inside the brackets is included |
| (* XY) | asterisk inside brackets | the sentence is ungrammatical if the material inside the brackets is included; otherwise it is acceptable |
| $\begin{aligned} & ? \#,!\#, \\ & \#(\mathrm{XY}), \\ & (\# \mathrm{XY}) \end{aligned}$ |  | (the same combinations that are found with the asterisk * are also used with the hash \#; !\# indicates that the sentence causes strong puzzlement to native speakers, for instance) |

Glossing marks the morphological material present in the Skou example, not necessarily the category that is represented. As an example of the importance of this distinction, consider the following simple and unambiguous glossed clause:

$$
\begin{align*}
& P e=w-a ́ \quad \text { pá. }  \tag{i}\\
& \text { 3SG.F=3SG.F-stand.up house } \\
& \text { 'She stood up in the house.' }
\end{align*}
$$

In this example the clitic $p e=$ on the verb marks third person, singular number, and feminine gender unambiguously. No other combination of person, number, and gender features may be glossed by this morpheme. Further, the prefixal $w$ - is also unambiguous as a morphological representation for 3SG.F: it occurs on all 3SG.F verbs in the glottal paradigm, to which this verb
belongs. As such, both morphemes are glossed uniquely for their paradigms, and both unambiguously and maximally separately from any other morphemes.

In contrast to this, examine the paradigms for the verbs 'eat', 'do' and 'go', in their inflections for person, number and gender (for an explanation of the orthography, see 2.7).

Table i. The verbs 'eat', 'do' and 'go' (in orthography)

| 'eat' | SG | $=\mathrm{PL}$ |
| :--- | :--- | :--- |
| 1 | kang | nang |
| 2 | mang | ang |
| 3 | kang | tang |
| 3 F | pang |  |


| 'do' | $=$ | $\overline{\mathrm{SG}}$ |
| :--- | :--- | :--- |
| 1 | $l i$ | $t i$ |
| 2 | $p i$ | $l i$ |
| 3 | $l i$ | $t i$ |
| 3 PL | tue |  |


| 'go' |  | SG |
| :--- | :--- | :--- |
| 1 | $r e$ | PL |
| 2 | $m e$ | $r e$ |
| 3 | $t i$ | $t e$ |
| 3 F | $t e$ |  |

In the verb 'eat' the form [ $\left[\begin{array}{l}.]\end{array}\right]$ is uniquely second person plural, but this is also the stem form of the verb ( 2 PL is often the root of inflecting verbs in Skou). Since there is no morphological marker of 2PL, the verb is glossed as 'eat', not as '2PL-eat' or ' 2 PL:eat'. All other cells in the paradigm are prefixed, and all the different cells are indicated as prefixal: $m$-ang for mel, glossed as '2SG-eat'. Similarly, with 'do' the form [li] does not contain morphological material that indicates $1 \mathrm{SG}, 3 \mathrm{SG}$. NF, 1 PL or 2 PL , the persons with which it appears, and so is glossed simply as 'do' for these persons, while the other pronominal inflections, which are unique ([pi], [te] and [ i$]$ ) are each uniquely glossed. On the other hand the form $[\mathrm{t}$ ] in the inflections for ' go ' has been glossed variously as '3SG.F.go' and '3PL.go', because in general the forms for third person feminine and third person plural are differentiated. The glossing is thus an immediate representation of the morphemes when these morphemes are regular, but is somewhat abstracted when they are irregular.

The same phonological string has been glossed in different ways when it clearly occurs in different paradigms. Consider the free prime pronouns, the genitive forms of the pronouns, and the dative forms (shown in orthography).

Table ii. The free pronouns, the genitive pronouns, and the dative pronouns

|  | SG | PL |
| :--- | :--- | :--- |
| 1 | $n \grave{l}$ | $n e$ |
| 2 | mè | $e$ |
| 3 | $k e$ | $t e$ |
| 3 F | pe |  |


|  | SG | PL |
| :--- | :--- | :--- |
| 1 | $n \grave{ }$ | $n \grave{e}$ |
| 2 | $m \grave{e}$ | $\grave{e}$ |
| 3 | $k e ́$ | $t \grave{e}$ |
| 3 F | $p \grave{p}$ |  |


|  | SG | PL |
| :--- | :--- | :--- |
| 1 | $n e$ | $n e$ |
| 2 | me | $e$ |
| 3 | $k e$ | $t e$ |
| 3 F | pe |  |

In these paradigms the form nì appears twice and is glossed separately as ' 1 SG ' and '1SG.POSS', respectively. The justification for the different glosses comes from the fact that the different forms are drawn from clearly different paradigms, which happen to show some syncretism across forms. Similarly, the form ne appears three times, and is glossed differently each time ('1PL', '1SG.DAT', and '1PL.DAT'), though in this case a (weak) argument could be made for glossing the last two forms identically, supposing a collapse in the singular/nonsingular category for the dative set. The lack of any other collapses makes this possibility less likely.

There is one point which is completely inconsistent with this other reasonably methodological approach to marking only the morphosyntactically motivated distinctions, and that concerns the glossing of the ergative-marking pronouns (see 6.3.2). These are
morphologically nothing more than the regular free pronouns, yet their function when used as summation pronouns is highly restricted, with them appearing only on the A of the clause. For this reason, even though they are morphologically identical to the regular free pronominal set, they are glossed with '.ERG'.

The very fact that various ungrammatical sentences, or sentences of dubious acceptability, have been included in this grammar is a clear indication that, in addition to participant observation and the transcription of texts, the stock-in-trade of the field linguist, considerable use has also been made of direct elicitation. I make no apology for this; it is a fact of linguistic fieldwork that we, in the field, ask questions of our informants, and do not, except in the most monolingual of situations, simply work as auditory sponges. Given that I have this material, it seems a shame not to present it, and so help to delimit the grammar more thoroughly for the reader, making it both more inclusive and more useful.

In addition to the linguistic abbreviations and conventions, the following standard abbreviations for kinterms have sometimes been used in glossing, in order to reduce the space that glosses such as 'mother's.younger.sister' for tóeùe would take up (compare with the succinct ' MyZ ').

| F | father | Z | sister |
| :--- | :--- | :--- | :--- |
| M | mother | Si | sibling (either sex) |
| S | son | y | younger |
| D | daughter | e | elder |
| P | parent | H | husband |
| C | child | W | wife |
| B | brother | Sp | spouse |
|  |  | o | other's |

These terms apply iteratively left to right. This means that, for instance, hóeto is glossed as ( PSiC ) SpSi , to show that it refers to (without the brackets) a husband or wife's brother or sister: spouse's sibling, that is, brother or sister in law. An additional reading is that the term is used to refer to a cousin's brother or sister in law: that is, a parent's sibling's child (= cousin)'s spouse's sibling. There is (at least in my use of English kinterms) no term in English that could be used to express the cousin's brother/sister in law relationship, and certainly none that could encompass both of the kin relationships that hóeto covers, both SpSi and PSiCSpSi . Where the context of an utterance made the reference clear, a kinterm has occasionally been glossed simply with an English translation, if that is exact enough to not mangle the Skou divisions too much. Thus hóeto is also found in this book glossed and translated as 'brother in law'.

## Updates

While I have tried to be as thorough as possible in checking through things, it is more than likely that some corrections to this text will need to be made, hopefully just typographical but perhaps factual as well. Fallibility is all too often my forte. Such errors of fact, typing, and analysis that become known to me will be able to be found as http://www.donohue.cc (and then follow the links to academic, and languages, to find the Skou pages), which in an ideal world will be updated regularly. Any suggestions or corrections will be gratefully received at the email address listed on the Skou page mentioned above, where I hope to continue to make available other materials, both primary and secondary, on this most interesting language.

## Acknowledgments

I had been inspired to work on Skou ever since reading Bert Voorhoeve's notes in his 1975 survey of the languages of Irian Jaya (Languages of Irian Jaya), and then finding the more detailed notes on the language in his 1971 article. Before first meeting Skou speakers I had had numerous occasions to marvel at the accuracy of what appear to the uninitiated to be throwaway lines of Bert's with regard to other languages that I had since come into contact with. Time and time again the apparently effortlessly produced comments on aspects of the grammar of one language or the other prove, decades later and following much more research revealing far more data than was available to Bert, to be completely accurate summations of the language structure. Therefore, for having started the ball rolling, first thanks are due to Bert Voorhoeve, who also looked out for me on numerous occasions, and who continues to inspire me. Heel erg bedankt voor alles dat U voor mij gedaan heeft, en ik hoop maar dat deze beschrijving U wat plezier doet.

Why Skou? Well, my first brush with linguistics, and then later more certain coat of paint, came from Phil Rose, and his fascination with tone and tonal systems has to at least some extent rubbed off on me, to the extent that non-tonal work of mine has always left me feeling somewhat guilty. This, or at least the parts of it that deal with tone, might make up in some way for my meanderings into other areas of linguistics.

Malcolm Ross kindly lent me a tape of himself and two Dumo speakers during an elicitation session. To so generously aid someone who you have not even met, and to trust your recordings, full of their own idiosyncrasies, to a stranger, speaks volumes about Malcolm's scholarliness and well-placed assurance in his own methodology. Thank you, for that introduction to the languages of New Guinea (the Skou family, no less) and for much more later on. I hope that the prose in this book pays back in some way the many (many!) hours you have slaved over my impenetrable prose in another book.

My earlier description of Tukang Besi, an Austronesian language of central Indonesia (A Grammar of Tukang Besi, Mouton de Gruyter 1999), provided me with training in grammarwriting, and, as any reader of both that book and this will easily see, has strongly influenced the organisation of this book. This was not intentional, but it seemed the best way, to me, to present the data. I'm not sure if that means that I'm stuck in a rut, or that it really is a good way to present data and argue for interpretation. I should note that the fact that this book has nineteen chapters, and not twenty, annoys me somewhat, but perhaps points to a willingness to let at least some aspects of the language's structure to dictate the manner of its presentation, and to not force the language to conform. In any case, the points at which this book is organised differently to that one are about $50 \%$ a result of the structure of the language dictating the change, and $50 \%$ the result of me becoming spooked by the overly-similar organisation in the table of organisation, and changing it just for the sake of change. I've noticed, glancing over the table of contents, that I am more willing to more thoroughly investigate, and report on, the lexicon, and to acknowledge that the lexicon, a source (by definition) of irregularities in language, quite happily ruins generalisations and regularities that the language otherwise follows quite well. I seem to be progressing.

My first trip to a Skou village took place at the invitation of Dwight Hartzler, who also put together a mean curried egg sandwich. While I gained more mud than linguistic insight on that day (not entirely his fault), glancing back over the fairly random notes that I made I can see
early signs of my confusion about many things that confuse me still. Dwight and Margaret Hartzler have also both provided company and friendship over the years.

More generally:
An anonymous Kamoro man in Fakfak first provided tonal minimal pairs for me in a New Guinea context. It excited me no end, to know that these things really went on in this part of the world, and to hear them with my own ears.

Duane and Heljä Clouse provided me with my first systematic listen to the tones of a seriously tonal language from New Guinea, Kirikiri. That probably set me back at least a year in starting my own work on a tonal language, so scary was the experience.

Mike Moxness provided a sane voice of moderation, in the tradition that Chuck Grimes first taught me, to remember that people speak the language, and that they don't really care that there's a linguist interested in their grammar. Wise counsel. I think we'd be a stronger field if more people would remember this simple advice.
Dave and Tammy Price have done their best, often successfully, to distract me from doing the work that I needed to get this finished. Thank you. I'm sure that this book will not in the least distract them at all.

Naturally, the Skou people, who have helped me in many different ways, deserve the greatest thanks. While the following list is far from a complete, I should definitely mention:

Loisa Mallo Hanasbey was the first person to sit down with me and spend many an hour elaborating, with patience greater than I believe I would have exhibited had our positions been reversed, about what seemed so natural to her, and so hard for this ke bà ùeli to comprehend. She encouraged me to go to Skou on my own while I was still feeling nervous about it. She also had some of the most sensible things to say about the way I was writing words down, often expressing amazement that I could get it so wrong, and offered not only her time and that of her family, but also her philosophy and kindness.

The Kemo family has always been generous in Skou-Mabo, helping me with food and accommodation, encouragement, introductions, friendship and linguistic data. Special note should be made of Gideon and Theo, who despite frequent exasperation kept at it.
The Mallo clan have always been welcoming, and encouraging me in language use, even when I didn't really want to. I've benefited greatly from their presence. Alfius particularly has been a calm companion, and a smooth informant on many a wander.

Various members of the Rollo clan have made sure that I didn't get too stuck on that Skou-Mabo dialect; I can mention Seppy (and Mike), Abraham, and Abisai in particular, but this list is by no means exhaustive. I'm sorry I still haven't mastered the Skou-Yambe tones,but I appreciate the efforts you've made.
To my delight, as I was working on this grammar over an unhurried span of a few years (thanks in large part to the generous terms of a postdoctoral fellowship at the stimulating environment of the University of Sydney), first Doug Marmion and then Andrew Ingram have come to work on languages closely related to Skou, Wutung and Dumo (see 1.4). I doubt whether anyone else will read this grammar with quite the same personal interest or professional scrutiny that they will, and I'm glad that there are, and will be, other people with a linguistic
interest in this small but lovely part of the world. Slightly further afield, but still genetically related, Lila San Roque, Miriam Corris, Lea Brown and Matthew Dryer have experienced what it is to be immersed in a tone language with all manner of phonological (and other) oddities on the north coast of New Guinea. They're my first audience. Enjoy, guys.

Bá páne ni ne nawò e loe la yano ni ne e loe, ya héfêng e weleng ni!.

## Pictures

The following pictures give some visual idea of the Skou villages and their inhabitants.
Picture 1. Tangwáto (Tanjung Jar, Tanjung Hol) cape, the western border of Skou lands, seen in the east from Skylen, between Entrop and Abepura. Behind Tangwáto the slopes of Mt. Bougainville, just over the border in Papua New Guinea and part of Wutung village's lands, can be seen. The foreground shows Tobati (on the left) and Enggros (on the right), Austronesian-speaking villages in Yotefa Bay, with which Skou has many marriage connections.


Picture 2. The foreground shows Tangwáto prominent against the silhouette of Mt. Bougainville in the background, together defining the borders on the west and the east sides of Skou land.


Picture 3. The stretch of beach east of Tangwáto where the three Skou villages are found. The mountains on the horizon are the border with PNG, while the low hills that form an extension of Tangwáto are the mythical homelands of the Skou people.


Picture 4. Skou Sai village (Te Bapúbi), the easternmost and smallest of the Skou villages, from the air.


Picture 5. Skou Mabo village (Te Máwo), central Skou village.The way to the road that runs from Jayapura to the border can be seen in the top of the picture.


Picture 6. Alfius Mallo pointing the way to Skou Yambe, for reasons unknown. The GKI church in the background has the best display of traditional carvings in the area.


Picture 7. Skou Yambe village (Te Tángpe) from the air. The most populous Skou village.


Picture 8. A canoe house on the beach between Skou Sai and Skou Mabo. These houses are built for canoes receiving repair work or final building.


Picture 9. Skou Mabo man and his two daughters, in their best clothes, on the beach in the morning.


Picture 10. The coast stretching west from Skou Mabo, with Tangwáto in the background behind the spray.


Picture 11. The start of the white cliffs on the northern side of Tangwáto, west of Skou Yambe.


Picture 12. Theo Kemo and his eldest daughter looking over an early literacy book in Skou.


## Dedication

This book is dedicated to Loisa Mallo Hanasbey, who peacefully passed away in prayer on April 17th 2003. Without doubt most of what I have learned of the Skou language has come from her, though she never felt constrained to limit herself to instructing me just about the language.

Picture 13. Loisa Mallo Hanasbey, valued Skou informant and friend.


This book presents a description of the grammar of the Skou language, with at least basic coverage of most other 'core' parts of the grammar, and more detailed coverage of selected topics. It cannot do equal justice to the entire range of grammatical systems found in the language, nor, in all likelihood, cover all aspects of those systems that are described here. It does, however, describe some of the interesting features that can be found in the language, which represents a previously under-known part of the linguistic world, and has much of interest for linguistics. While many of my own interests are reflected in these pages more adequately and in more detail than other aspects of linguistic research, which are no less worthy of attention, this reflects my shortcomings rather than any lack of interesting data and problems from the language.

Map 1. The Skou area in New Guinea (see maps 2 and 3)


The language described here as Skou, and which has been referred to in the linguistics literature as Sko, Skou, Səkou, and Tumawo, is referred to locally as Te Máwo pílang nè ne ('Our, the Mabo people's, language'). Skou is related to other languages in the small Skou family of which it is the westernmost member. The language family stretches across the north coast of New Guinea, past Vanimo to Leitre (More distant relations can be established with other members of the Macro-Skou family, including but not confined to the previously-reported Krisa, Rawo, Puari, and Warapu [= Barupu], albeit in a substantially different arrangement to Laycock's $(1973,1975)$ arrangement. See 1.2). The language is spoken with minimal dialectal variation by the inhabitants of three villages, Skou Yambe, Skou Mabo and Skou Sai, in the centre of the north coast of New Guinea (in Papua, formerly Irian Jaya; see Silzer and Clouse
1991). The general location of Skou, and the other languages closely related to it, is shown in Map 1. The three villages start immediately above the high-water mark on the beaches that form their northern borders, though in all cases traditional land runs some way inland. To the west the Skou village lands are naturally enclosed by the cliffs of the cape that is known locally as Tangwáto pípong, in Indonesian as TanjungJar (or Tanjung Hol) To the east the Tami river forms another natural division between the Skou and their eastern neighbours who now all live in Wutung. This same river formed the border to the south, but to the south-west the ownership of land was a source of ongoing dispute between the Skou and the Elseng people, until the 1980s when the Indonesian government turned the flatlands there into a transmigration zone, and requisitioned all the land, making the issue of land ownership academic. The only uplands in the area are the hills that lead to Tangwáto pípong, where there are no settlements or gardens, but where some Skou Yambe people do occasionally go on hunting trips. These hills are quite steep, and from the northern side, on which the Skou villages are situated, they rise for the most parts in sheer limestone cliffs from a narrow coastal strip, which is fairly intensively farmed. Where these hills slope down to the level of the surrounding flat forest lands, south of Skou Mabo, the land is left more in its natural (semi-cultivated) state, with less gardening and more land left for wild sago, other forest greens, and hunting and gathering practices.

There are approximately 700 members of the ethnic group that speaks the language, almost exclusively in these three villages. Although the name Te Máwo pílang nè ne is used by speakers to refer to their own language when speaking it, whether they are from Skou Mabo or from one of the other villages, it has not been used here. One of the main reasons for this is the fact that the name Skou is judged to be an acceptable designator for their ethnic group, and has come to be recognised as the 'official' (= Indonesian governmental) way to refer to their language, and the normal way to refer to the language when talking to outsiders. The name Səkou is the name traditionally used in Tobati and Enggros, the western neighbours of Skou, to refer to the language, though the 1968 Capita selecta Propinsi Irian Barat does not list Skou as an ethnic group, listing only Nafri, Tobati, Sentani, Ormu, Noi (= Nyao?) and Tanah Merah as sukus (ethnic groups) in Djajapura (= Jayapura) subdistrict (kecamatan). Cheesman, writing of the main Skou village (1938: 71) records that

This is spelt Sko on some maps when it is marked at all, but has always been pronounced Seko and is so spelt [sic] on the Boundary Commission map of the district.

The spelling Skou has become (along with Skow and occasionally Skouw, showing modern pseudo-Dutch influence) the 'standard' spelling of this word in Indonesia, though linguistic references to the language, such as they were, changed to $S k o$ in a rather half-hearted fashion after 1971. I shall refer to the language as Skou, following a compromise between earlier linguistic and anecdotal references to the language group and speaker preference, and with the aim of avoiding the unnecessary propagation of new language names in a region (New Guinea) that already has more than its fair share of languages (and so represents an already unfair memory load on the part of researchers). I shall retain the older spelling Skou, rather than Sko, reflecting the diphthongal pronunciation of the name in its homeland, [उב̈'kow].

The materials presented here were collected by the author in the period 1998-2003, mainly from people in Skou-Mabo and Skou-Yambe or from people from these villages living in Abepura, while working on various literacy and cultural projects based in those villages (and others further afield in the province). The materials were mainly collected from people in their 30s and above, but the speech of those in their teens and 20s, if they were frequent Skou
speakers, was also listened to, recorded, and taken into account in the preparation of this grammar. During the years I have been working on this grammar my attention was not solely focussed on Skou, due to other linguistic commitments and to the reasonably frequent military interdictions on travel to the villages imposed by the Indonesian government, which prevented access to many speakers at different times. The materials reported here represent the speech of conservative Skou people from all three Skou villages, which have been known to evidence some minor phonetic and lexical variation, though I have not observed any consistent differences in grammatical judgements or grammatical structures based on the different villages. The unstarred sentences presented in this description can be accurately taken to be acceptable to all speakers with an active command of the language (though stylistic variation abounds), and those marked with a star or some other indicator of less-than-unquestioned grammaticality can be assumed to have that judgement from most speakers, from all villages, at most times of the day.

This introductory chapter will present some basic social, historical and geographic information about the Skou area, and some comparative and regional information about the linguistic state of the language. The end of this chapter is a summary of the basic typological profile of Skou, with reference to following chapters in which the various points raised here are explored in more detail.

### 1.1 The Skou language

The Skou people are socially isolated in Papua (formerly Irian Jaya) by the two factors. Firstly, they are the only member of their linguistic family in the country (all other linguistic relatives are now in Papua New Guinea, since the inhabitants of Sangke, Nyao Nemo and Nyao Kofro moved across the border en masse to present-day Nyao in early 1969, following the Indonesian takeover of the province). This has ensured that, socially, they are somewhat apart from their neighbours. Secondly, their language is typologically very different to the languages (outside the Skou family, with whom contact is now curtailed) spoken by other people with whom they have frequent contact, namely Elseng, Sentani, Nafri, Tobati, and Malay/Indonesian. These factors, both social isolation and linguistic non-conformity, have led to widespread esoterogeny (Thurston 1982, 1987, 1989) on the one hand, and also to widespread borrowing and adaptation, on the other, in the twin efforts to assert their distinctive identity, and to fit in with their changing social milieu. There is evidence that the language has been (perhaps deliberately) complicated by speakers in the recent past, possibly in an effort to maintain and assert their separate ethnic identity through their linguistic distinctiveness (see 1.3). There are also good grounds for believing that many of the historical changes that have ultimately resulted in the language being the way it is today are the result of adaptations to local areal norms in the Humboldt Bay region, and subsequent compensations of those changes.

Table 1. Typological differences between Humboldt Bay area languages

|  | word order | V agr. | NP case? | tones? | vowels? | Gender? |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Skou | APV/SV | s-V/p | (ERG) | tonal | 7, (\#, 『) | fem, n -fem |
| Elseng | APV/SV | s-V-s | ACC | - | 7 (i, e) | - |
| Sentani | APV/SV | V-s-p | ACC | - | 7 ( ${ }^{\text {a }}$, a) | - |
| Nafri | APV/SV | V-s(p) | ACC | - | 5 | - |
| Tobati | PAV/SV | s-V-p | ACC | - | 5 | - |
| Ormu | APV/SV | s-V-p | ACC | - | 5 | - |
| Papuan Malay | AVP/SV | $\mathrm{s}=\mathrm{V}$ | - | - | 5 | - |
| Indonesian | AVP/SV | V | - | - | 5/6 (3) | - |

Some of the salient points of difference between Skou and its genetically distinct, but geographically close neighbours in Humboldt Bay and its hinterland are shown in table $1 .{ }^{1}$ Here we can see that while word order in Skou is not so divergent from its neighbours, all the languages in the area (with the marked exception of Tobati) conforming to the APV/SV order that is typical of languages in the New Guinea area. The use of verbal prefixes, rather than suffixes, marks Skou as distinct from most of the other languages in the area, and both these features are different to the settings in Indonesian, the national language (and its local variety Papuan Malay). While it is true that prefixes on verbs are also found in Elseng and Tobati, their presence in Skou is still regarded as an exotic feature: Elseng is a language with little or no prominence, and Tobati is widely regarded as bizarre and unlearnable by people in the Jayapura area, mainly due to its unusual segments, including [B] and [fi] (Donohue 2002). (In the Jayapura area the language is commonly jokingly referred to as BahasaInggeris, a double play on the name of the second Tobati speaking village, Enggros, and the [ $\quad \mathrm{b}]$ sounds.) The optional ergative marking in Skou is typologically aberrant in the area, where case systems if present have an accusative, not an ergative, alignment. Most of all the presence of tonal distinctions and front rounded vowels is an immediately salient idiosyncrasy that sets the language apart from the others spoken near Jayapura. Another major phonological difference is the lack of an $\mathrm{s} /$ phoneme (or allophone) in Skou; all the other languages have at least an allophonic [ 3 ], but Skou lacks even this, traditionally substituting an $/ \mathrm{I} /$ in loan words involving an [3].

It is equally instructive to examine the differences between Skou and its genetically related neighbours in the Skou family, all of which are found across the border in Papua New Guinea. From this perspective we can see the amount of areal adaptation that Skou has undergone. The appearance of a semi-regular case marker for the ergative argument is not found elsewhere in the family, and represents a Humboldt Bay feature. The presence of an [r], and the lack of any consonant clusters is unusual in the family, ${ }^{2}$ though Leitre too has reduced its historical CC onsets. The presence of two contrastive non-back vowels is unique in the family, as is the lack of a distinction between a more open and a more close mid vowel, both front and back (that is,

[^0]the distinction betweenes and $\square:$, found in all other Skou languages, is not maintained in Skou itself, where the open and closed varieties are present as allophones of the phonemes $\varepsilon /$ and $/ \sigma /$ ). Finally, the presence of a gender system is not typical of the family, though in this case it is a retention from the proto-system, rather than an adaptation to Humboldt Bay norms.

Table 2. Some typological differences between Skou family languages

|  | V morph. | NP case? | sonorants | clusters? | vowels? | Gender? |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Skou | $\mathrm{s}=\mathrm{s}-\mathrm{V} / \mathrm{o}$ | (ERG) | r, 1 | - | 7, (\#, (i) | fem, n-fem |
| Nyao | $s-\mathrm{V}$ (/o) | - | r | some | $8(\mathbf{i}, \mathrm{e}, \mathrm{O})$ | - |
| Wutung | $s-\mathrm{V}$ | - | 1 | many | 8 (i, e, -0) | - |
| Dumo | s-V | - | $1(([r]))$ | some | $8(\mathbf{i}, \mathrm{e}, \mathrm{O})$ | - |
| Dusur | $s-\mathrm{V}$ | - | 1 | some | $8(\mathbf{i}, \mathrm{e}, \mathbf{0})$ | - |
| Leitre | $s-V(/ 0)$ | - | $1([r])$ | - | $7(0,0)$ | - |

We shall return to the comparison of Skou with the languages with which it abuts in sections $1.4,1.5$ and 1.7, following an introduction to the social and historical context of the villages.

### 1.2 The tides of history

Most of the history of the Skou people is not recorded, but can be gleaned from oral histories of the clans, accounts of their interaction with neighbours, these neighbours' accounts of the Skou people, and a comparison of the linguistic data obtained for a wide area of north-central New Guinea. Since the advent of the Dutch colonial period, and later other outside influences, in the area there has been some account, albeit intermittent and incomplete, of the Skou people in a written form.

Judging from what we can reconstruct of the unwritten history of the area, it is most likely that the Skou cultural group is not originally a coastal one. There is ample evidence to support the hypothesis that the modern dwellers of Skou Yambe, Skou Mabo and Skou Sai represent at least in part the descendants of a people who moved down the Tami river from the hinterland, somewhere on or east of the Papua New Guinea border. All clan histories in Skou relate either that their ancestors came from the mountains to the south-east, or else that they are more recent clans that have arrived from neighbouring groups along the coast to the west or to the east. The hypothesis in full can been seen in Donohue and Crowther (2000), and runs as follows, as relevant to the Skou area:

- speakers of proto-Macro Skou (see figure 2, 1.4) lived along the middle Pual river area in Papua New Guinea;
- disrupted by the intrusion of people ancestral to the modern Bewani, Mbo and Ningera languages they moved away from this region, towards hills to the north and east
- of those that moved north, one branch, the ancestors of speakers of Skou family languages (see figure 1, 1.4) moved north and west, arriving at the area now marked by the junction of the Papua New Guinea border and the Tami River's eastern tributary, near modern Nyao
- these people largely moved down the river to the coast, arriving just east of the modern Skou villages; the majority of the people subsequently moved east along the coast (see Map 3), but the Skou people stayed behind on the beaches west of the Tami

Once established along the coast west of the Tami river the Skou people started to engage strongly with the Austronesian populations of the Humboldt Bay region, notably the Tobati/Enggros people of to $\beta$ wrabic and ipinos villages in Yotefa Bay (Tobati and Enggros are the accepted, and acceptable, Indonesian versions of the names; in Skou the villages in question are known as $T e ~ P a$ and Te Palong, referring to their locations in Yotefa Bay), ${ }^{3}$ and to a lesser extent with the inhabitants of the inner bay at Jayapura, the Kayu Pulau (known as Te Mélong in Skou) and Kayu Batu (Te Purà), and further west the Ormu people (Te Lùng). These connections are maintained to the present day, striking only in contrast to the comparative paucity of social interaction with the Elseng, Nafri (Te Téme) and Sentani (Te Húng) people, who also adjoin the Skou lands. This probably reflects the common origin of the Austronesians and the Skou as outsiders: the Elseng and Sentani are all 'bush' peoples with interior connections, and the Nafri are related to the interior Sentani. The Austronesians are all immigrants from the east, back-migrators from the great Oceanic spread that passed this region of New Guinea 3,000 years earlier (Bellwood 1985). The Skou, too, are not indigenous to the area, though they have much closer roots. This commonality means that they share the lack of substantial land-holdings, certainly a lack of undisputed land holdings, and an orientation towards the sea. The Oceanic dwellers of Humboldt Bay have a long history of sea-faring, while the Skou had to learn this after their arrival at the coast. The traditional canoes of the Skou area, remarked on by Laycock (1975), and Friederici (1912), and also found traditionally as far east as Warapu (Thomas 1942, Friederici 1912) are in fact a copying of the sea canoes of Ormu, an Austronesian group. The Elseng, Nafri and Sentani, by contrast, represented rivals for land and for hunting grounds, and practitioners of the same interior, 'bush' culture that the Skou already knew, and so were less of a source of environmental knowledge, and more or a source of rivalry.

The first major contact that the Skou people had with a non-Papuan culture in recent times probably came with the arrival of the first 'Malay' bird-of-paradise traders in the region in the late 1800s (Swadling 1996) ('Malay' in quotes because these traders probably represent a wide variety of ethnic groups from across eastern Indonesia). The bird-of-paradise trade preceded the European colonial parcelling of the island, and preceded organised administration of the region. Malay traders extended at least as far as Lumi district in Sandaun Province, Papua New Guinea, where the name malai is still remembered by the One inhabitants of Kabore district (see Seiter for further references on the extent of the bird of paradise trade in New Guinea). The impact that this irregular contact had on the Skou cannot easily be judged, since there are no historical records and little in the way of oral histories of the period. Some evidence can be taken from the fact that the variety of Malay spoken by Skou people is distinctly non-standard, and so, along with other varieties of non-standard Malay spoken on the north coast, probably represents a linguistic tradition that extends back to before the Dutch presence in New Guinea. Some loan words, such as rabáká 'tobacco', < general New Guinea sabaka, ultimately related to tobacco, show a donor-language with an $s$ borrowed as an $r$, one of the regular reflexes of proto-Skou

[^1]*s in Skou (see Laba 1996 for firther discussion of the distribution of 'tobacco' words in New Guinea). This is in contrast to more recent loans, such as nasi 'rice', which survive with the [ 3 ] intact. Other early linguistic influence includes such words as the traditional designation for rice, rámángku, literally 'ant (species)s' eggs', a common calque for this new foodstuff in New Guinea. The fact that one of the two names for Indonesians, Te Táng, literally 'those bird people', refers to this early bird of paradise trading shows that there was no significant earlier contact with western Indonesians. (The other name in use for Indonesians, Te Tútú, 'those whites', suggests that contact with non-Papuans was with Indonesians before Europeans, who are known as Te Bà Ùeli 'those reds'.)

The establishment of a Dutch presence in Hollandia, later to be popularly known as Jayapura and known to the Skou people as Nofé (and briefly known as Port Numbay to its residents in the late 1990s), in 1909 began slowly, and did not disrupt the local socio-political life in any sudden way. The Pax Nederlandica had little affect on the Skou area, as they had in any event enjoyed in the main peaceful relations with the villages around them, in contrast to the struggles that went on in the Àbi Abepura and Te Húng Sentani areas.

Cheesman (1949) presents an independent and spirited account of an English naturalist travelling through the area shortly before the Second World War. Cheesman, along with, it seems, scores of nameless and unthanked porters, travelled through the Skou village area on her walking tour of the north coast of New Guinea. She reported (1949: 205) that

There are three distinct villages of Seko, Sko-jambi, which has a mongrel population (their neighbours call this village Kanaka), Seko-mamba near by, and Seko-saii, which is some distance away.

Cheesman goes on to explain the problems that the Skou villagers had with their Ambonese missionary, and the clash of cultures that frequently arises when the condescending outsider tried to assert his exclusive world-view on the locals, a view that was not backed up by the Dutch controlleur for Hollandia district. (Such disputes between poorly-educated evangelists and local villagers are common to this day in parts of interior Papua.) She reports (1938: 272) that there was a government post-house in Skou, and when she visited noted that 'there were several Malays and Chinese traders already lodging there that night.', indicating that the proximity of Hollandia was having an effect on the type and quantity of non-local goods available in the villages, and that some sort of trade

The advent of the Second World War and the arrival of an occupying Japanese force in West Nieuw Guinea did little to change the life of the Skou people. Unlike other parts of eastern Indonesia, which suffered greatly under the Japanese occupation, the Japanese presence in Skou was limited in numbers, and was both accepted by the local population and accepting of their lifestyle. Older Skou people report that the Japanese garrison in Skou Mabo lived in the same houses as native Skou people and went on fishing and hunting trips with their hosts, all in a for the most part convivial spirit. No Japanese person is claimed to have learned any of the language. The only major impact of this period was the building of an airstrip at the area known as Skou Yo, behind the current kecamatan office on the main road south of Skou Mabo. This was a labour that occupied many of the residents for a number of months, clearing a substantial area of what was then dense bush and elephant grass (the clearing efforts were highly successful, and it remains partially clear to this day, sixty years later). It also involved a change in the relations between the Skou people and the Japanese, who became much more demanding, and strict about work targets. The airstrip was only more than a source of hard work when the
first plane arrived: nothing that their Japanese friends had said prepared the Skou people for the experience of a plane landing right next to them, and many fled into the bush never to be seen again. Some of these settled permanently with the Te Húele Nyao (also known as 'Niņkra', Nikra', Sangke) ${ }^{4}$ people, and some died in the jungle. Those that remained were due for another shock when the advancing American forces bombed the area in order to destroy the airstrip. While these appears to have inflicted only limited casualties on the Papuans (one elderly couple from Skou Yambe who were preparing lunch were killed, while everyone else had fled to the bush at the approach of the planes), it was a cause for great shock and was devastating for the material possessions of the villages.

The arrival of the American forces under General Macarthur caused a great stir in the region. Macarthur temporarily created a huge military base out of nothing in the hills north of Lake Sentani, and changed the views forever of the people who came into contact with the American war effort about what was possible in their world. Rather than being remembered for their military abilities, or the sheer numbers of people involved in the war effort, it is the materialthat was imported into the region by the Americans that has formed an enduring myth. By all accounts prodigious quantities of food, jeeps, clothing and other supplies were shipped, flown, and in some cases parachuted in to the area, to the astonishment and delight of the locals. ${ }^{5}$ This brush with abundance certainly changed the mindset of many of the now older generation, and probably is partly responsible for much of the discontent about the present Indonesian administration, in that it showed early on the possibilities for 'development' in the area, which contrast sharply with the observed reality of 'development' under the imposed government. The fact that the very cargo cult-like hyperabundance of the Macarthur era was not a sustainable one, as shown by the levels of development under the Dutch preceding the war and in the 1950s following the war, does not enter into consideration.

Post World War II the American occupation blends in to a brief period of Dutch reoccupation (1945-1961) before the arrival of the Indonesian armed forces. This period is remembered as being the time of the [ïin], a reference to the United Nations (UN). The abundance of the American occupation continued, with Holland pouring in much (belated) attention to what was now the only jewel in its colonial crown. This period saw the initiation of a lot of development projects that endure to this day, such as the construction of the Jayapura hospital, and perhaps even more importantly the training of many locals (more from Biak than from the Jayapura region) in administration and other skills that were to be necessary for a potentially independent land. Holland could only too well read the signs, and saw that the colonial age was by and large coming to an end. Still smarting from the revolution in Java that had accompanied the defeated Japanese forces 'granting' independence to the 'Indonesians', Holland was determined to 'save' West Nieuw Guinea from the same fate, integration with the growing Javanese empire, that had fallen on the other West Indian islands. Were it not for the unofficial policy of appeasement of non-communist countries, and resulting UN inaction when the terms of the UN mandate were so blatantly disregarded by the Indonesian armed forces, there is every likelihood that an independent state might have resulted from this period of

[^2]intense development of infrastructure and training. As it is, in 1961 the Dutch were evicted from the island, and the period of plenty that is so fondly remembered came to an abrupt close. The period of the 1950s is beautifully documented in the journals Tijdschrift Nieuw Guinea and, more academically, Nieuw Guinea Studiën. The former journal presents an optimistic and clearly romanticised view of the relations between the Dutch colonial overseers and their colonial subjects, and presents a vision of what might have been in the former colony. The latter journal gives a more realistic picture of some of the difficulties facing the integration of West Nieuw Guinea into a modern internationalist economy.

The year 1961 saw the western half of the island of New Guinea taken over by the armed forces of the Republic of Indonesia, and the incorporation of West Nieuw Guinea into that republic under the name Irian Barat (later Irian Jaya, currently Papua). This development has by all accounts brought about a series of quite drastic changes, some positive and some negative. On the positive side, the Skou villages are now connected by a sealed road to the rest of the area occupied by Skou languages, whereas before the only track connecting the two political entities ran inland to New Moso (now known as Nyao), and was not so negotiable:

> The road is distinct nearly all the way, only at one point did we lose it and the whole party was obliged to spread out in all directions till it was picked up again. It was not really lost, but continued along an immense, fallen trunk in long grass for over a hundred feet, and that was overlooked at first. (Cheesman 1938: 77)

It is now easy for a person in one of the villages to visit relatives who have moved away, through marriage, or to go shopping in town. The road extends as far as the border with Papua New Guinea, and thus also facilitates travel to Wutung for traditional reasons, and travel from Wutung. Previously all travel to other villages was by boat, but with a sealed road and thricedaily bus services to town, that is much changed, since boat travel across the border is now prohibited.

The diet of the Skou people has changed, in the main for the better, as a result of the Indonesian arrival. A much greater variety of vegetables are now cultivated in the gardens, providing a more varied crop, important in times of uncertain harvests, and also a more varied nutritional intake for people. This has, from all accounts, resulted in a great decrease in disease relating to vitamin deficiency. The downside has been the drop in hunting opportunities that has come about as the result of encroachment on Skou land from settlers in Koya (see 1.3), and a growing reliance on store-bought foods reduces their earlier self-sufficiency, and means that more of the diet is composed of food with little nutritional content. ${ }^{6}$

Another change that has accompanied the Indonesian government's assumption of administrative control of the Skou area has been a sharp decrease in the number of traditional contacts with the Wutung people across the border, due to stricter policies and policing of border crossings. Skou Mabo now has a permanent police and army presence, as well as other administrative functionaries that 'work' in the kecamatan (sub-district) of Muara Tami (Tami River Estuary), whose sub-district administration building lies at the junction of the border road and the road that leads to Skou Mabo and Skou Yambe. This influx of outsiders, who have no familial associations with the locals and so do not feel obliged to adapt to local customs, has led to a sharp increase in the use of Indonesian/Papuan Malay in the village. This has advanced to the extent that it is unlikely that a casual visitor will hear any Skou spoken: almost all members of the villages, the only exceptions being some particularly old men and especially women, are

[^3]competently bilingual. Even a long-term stayer will not hear Skou spoken by any school-age children who attend school at either the primary school in Skou Mabo or a high school in Koya or Abepura.

Despite this wholesale influx of Indonesian and Malay, the prospect for Skou as a language continuing into the near future, at least, is not all grim (contrary to the conclusions in Donohue and Hartzler 1998). Although children attending school do not speak the language, it is apparent that they do understand it, as they are frequently addressed in it by their parents and other elders. Indonesian, while the main language of the school-attending cohort in the village, appears to be, perversely, an 'insider language', actively used in opposition to the language of the village to establish the identity of the teenagers. The fact that Indonesian is also used by the older people who travel to the markets in Abepura and Jayapura seems not to be a problem in its being appropriated by another age group for another purpose. The health of Skou, even when not spoken, can be gauged by the fact that on leaving school these same teenagers are suddenly speakers of Skou, even if only a few months have passed since their Junior High School (SekolahMenengah Pertama) exams. This reflects their status now not as wards of the state educational system, immune from prosecution for any violations of village conduct because of their requirement to fulfil governmental requirements, but as members of the village community. As such, in the absence of any significant employment for Papuan school graduates, now adopt a more traditional lifestyle, including gardening, hunting, fishing, and speaking the language of their ancestors. This pattern of sociolinguistic comeback in each generation is not unique to the Skou, but has been observed by this writer elsewhere along the North New Guinea coast, on Yapen island (in both Ansus and Saweru), and in Warembori (Donohue 1999). Janet Bateman (pc) reports a similar sociolinguistic environment amongst the Iau of the western Lakes Plains, a more traditional society. Amongst the Iau young people below marriageable age (which corresponds roughly to the age that Skou teenagers graduate from Junior High School, roughly 14-15 years old) are not traditionally expected to fit into the highly prescriptive sets of rules and behavioural regulations that characterise society on the Van Daalen river. They are permitted a significant degree of freedom, including that of the language they use, which is denied more 'grown' adults. Youngsters in Korodesi commonly speak in Elopi, a trade language of the lower Tariku river, at least as commonly as they speak Iau, but on reaching societal maturity they make the transition to being mainly Iau speakers, and Iau is no more an endangered language than is English.

### 1.3 The Skou ethnic group

Skou people are found natively in only three villages, west to east Te Tángpe Skou Yambe, Te Máwo Skou Mabo and Te Bapúbí Skou Sai. The earliest Dutch reports (eg. Verslag 1920) report the same three villages, in locations that are practically identical to their modern ones. The only recent movement that is known happened in the Second World War, when large numbers of Skou people moved up the Tami and Moso rivers. Those that did not marry into the Nyao village there later returned to the original villages. While close to each other, each village has a different 'character', and a slightly different variety of speech. They are linguistically unrelated to their southern and western neighbours, but do share frequent marriage links with the Austronesian speakers of Tobati, Enggros and Ormu. The Skou do share a common history and sense of ethnic identity with their neighbours to the east along the coast, most particularly Te Óeti Wutung and (Te) Jáwung Nyao. This connection was noted early on in the history of
research in North New Guinea, probably because of the ease of transport along the coast, and hence the ease of quickly investigating and comparing the different villages. The great mobility that has been shared by the peoples from Ormu in the west to Vanimo and, to a lesser extent, Leitre in the east also means that early researchers would have had easy access to people from a variety of villages. ${ }^{7}$ Of course, a sample of this sort necessarily skews the results that will be drawn from it, but that is one of the dangers of pioneering work.

Friederici noted the relationship between Skou and the languages to the east, noting that despite the similarities they remained distinct entities. He writes (1919: 258), concerning the relationship of Wutung with respect to Skou, that:
... sicherlich ist es eine andere Sprache, nicht etwa ein Dialekt derselben Sprache.
Cheesman (1938), discussing the villages between then-Hollandia and Vanimo, takes the same stance of under-differentiation when she writes that

There is a mixture of peoples among the Papuans themselves, without counting the Malay and Chinese elements, although they all belong to the Jotefa tribe as far as Mt. Bougainville

Despite these early notes, some earlier writers overstated the connections that link the villages between Skou and Vanimo. Thomas (1942: 163) classed all the coastal population from Vanimo west as belonging to the same language group, which he called 'Coastal', and stated that

The tribal or language group under discussion includes the villages of Wutong, Yako, Warimo, Manimo and Leitre, in the Vanimo sub-district, and also the three Seko villages in Hollandia, Netherlands New Guinea

Although he states that these people belong to one language group, he went on to state that
The people of the village at Leitre appear to differ slightly in dialect from Manimo and Warimo, and there may be some slight change at Wutong and Seko, but the natives of the various villages converse freely with each other.

Technically this is true even today: the conversation is carried out usually in Tok Pisin, or, for older people, in one of the other of the local languages, which remain distinct from each other. For speakers in their 30s or younger, from a Skou village, who visit villages near Vanimo, conversation is very stilted. It is most likely that Thomas observed people speaking to each other in each other's languages, not in the same language, and that Friederici's comments were as valid in the 1940s as they were in the earlier part of the century. Indeed, Cheesman (1949: 208-209), recording the meeting of her party of carriers from Skou with the inhabitants of Wutung, writes that

The Seko carriers did not attempt to fraternise with the Wutong villagers. ... I acted as interpreter, talking Malay to one group and pidgin-English to the other, for I was curious to watch their reactions. It was only the language difficulty which baulked them, they were quite friendly disposed to one another. They all seemed very keen to collect as much local gossip as possible in order to relate it to their own people when this odyssey was finished. ... It went on for hours - I could hear the murmur when I was half asleep. After dark they seemed to have collected enough of each other's tongue to be able to yarn more comfortably ... I was surprised to find how little affinity there is between the Papuan languages

[^4]spoken in the two villages, as I had though Seko spoke a dialect of the language common to all the north-coast tribes. ... If my carriers had been taken from Sekosaii probably they would have found more affinity with Wutong people

Clearly Cheesman's account is at odds with Thomas', and the time periods that they represent overlap enough for change not to have been a factor. The fact that the Wutung and Skou inhabitants used her as an interpreter in the early stages of interaction is quite clear proof that the two languages were not similar enough to each other to allow for them to be thought of as a single language, though similar enough to each other to be acquired, in basic form, fairly quickly. Cheesman's comment about Skou-Sai and intelligibility with Wutung probably refers to the fact that there is considerable marriage between Wutung and Skou Sai, but not with the other Skou villages, which tend to marry to the west. These remarks make it all the more likely that Thomas observed villagers either using each others' languages, or Tok Pisin (Cheesman's pidgin-English) to converse, rather than simply displaying some small degree of passive bilingualism. This said, even today speakers of the Vanimo coast languages often, when they find it advantageous to their argumentation, refer to the different villages from Skou to Vanimo, and Leitre, as speaking the 'same language' (in Indonesian bahasa sama; in Tok Pisin wanpela tok ples). Crowther (2001) documents the use of linguistics terminology by New Guineans to refer not to an individual language, as a linguist would define it, but to a linguistic sub-group, and this appears to be the case for Skou and its relatives as well. When questioned on actual intelligibility,I have found that interviewees usually back-pedal on their claims of linguistic unity, saying that, while the same languages, it is true that 'the words are different', 'the sounds are different', or 'the other villages mangle the language' (kata beda / bunyi beda ~ bahasa desa lain putar (Indonesian), ol tok i kranki ~ ol narapela lain itanim (Tok Pisin)). In the absence of extensive experience of surveying language attitudes in New Guinea, the kinds of information that would be acquired by questioning speakers of languages that one is not familiar with would not be overly helpful in determining language extent.

The Skou people have been described in not entirely complimentary terms by Cheesman (1938: 72). She describes the people of what appears to be Skou Mabo as follows:

Seko people would have been more attractive if they had been less bold, the manners of the women and children were trying because of their curiosity over the white woman, and their freedom from superstitions concerning her. It is the superstitious awe that we inspire in bush people which makes them shy.

When comparing the behaviour of Wutung people with Skous, Cheesman noted (1949: 208) that 'It was a lesson in discipline for the Seko party, whose manners were decidedly uncouth, to see how instantly my orders were obeyed.' Later, walking through Skou Sai, their different character (still prominent to this day) is mentioned (1938: 73):

We passed the unredeemed village the next morning, and saw the "men's house" with its steep roof and projecting gables with carved ends, and the special platform for praus. The men looked particularly sullen and unfriendly, and the women hustled their children inside the houses and shut the doors when they saw us coming. This was probably to guard them against the evil influence of a white woman.

Later, however, when passing through the same village on a subsequent trip, she appears to have markedly changed her opinions (1938: 275):

I was surprised to find a crowd of women and children who looked delighted to see me. I should have gone by with only a sidelong glance, because there were
the same who had called their children indoors when I went through their village with Herr Stuber. Their friendliness was so marked that I went up to the groups and talked to them. Not in their own words of course, but in the language of signs. They were making baskets and had a lot to say about them.

This indicates that the women did not speak Malay, and were at this time not so influenced by the changes that the Dutch administration had brought about. To this day very few Skou speakers live away from the three Skou villages; a handful of Skou people have married into Tobati and Enggros villages to the west, and two or three or so Skou live in Hamadi, working in the markets there or in clerical jobs in Jayapura. A small number of Skou people, exclusively from Skou Sai, have married to and moved to villages in Papua New Guinea, most notably Wutung, but almost no Skou people live in other native villages in Papua or Papua New Guinea. Wutung, and to a lesser extent Nyao, is a more welcoming environment than most for Skou people due to the large number of second-language speakers of Skou, approximately one hundred amongst the Wutung population (of six hundred), and reportedly a somewhat smaller proportion in Nyao.

Other changes that have taken place in the area include the loss of most of the men's houses, and the spread of Christianity. The Verslag contains a photograph of the men's house in Skou Sai, and Cheesman describes this same house in 1938 (two quotes above). The carving that Cheesman noted in the 1930s is still to be found in the carvings that decorate the pillars of the GKI church in Skou Mabo, preserving an old art form in a new medium.

All Skou people belong to one of thirteen nòeti patriclans, membership of which is for the most part confined to the inhabitants of a particular village. The distribution of the clans, the names by which they are referred to in Indonesian, and their relative sizes, are shown in table 3. (The numerical arrangement reflects Skou speakers' numbering of the world: Ramela, for instance, is consistently described as the 'second clan in Skou Yambe', and so on. Numerically ordering the different members of a class is a feature of New Guinean classification systems.) For each village the Skou names are given on the left, and the 'popular' names (Malay/Indonesian forms, used for official purposes such as identity card registration and school attendance) on the right; in some cases there is a transparent relationship between the Indonesian name and the Skou name, such as with the first three of the Skou Sai clan names. In a couple of cases there is a relationship, though it is not so transparent: Kemo is a simplification of Kóemo for use in a language (Malay/Indonesian) that lacks an [অ] (represented here with the digraph <oe>), and Patipeme is probably etymologically derived from bàti Póeme 'clan.name Póeme, with the same orthographic change as was seen with Kóemo. In many cases, however, there is no obvious relationship between the forms: Hùepa and Palora are an example of what appears to be a completely unrelated set of names for the same clan.

Table 3. Patriclans in Skou

|  | Te Tángpe / Skou Yambe |  | Te Máwo / Skou Mabo |  | Te Bapúbí / Skou Sai |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Te Léti | Rollo | Te Málo I | Mallo I | Te Lómo | Lomo |
| 2 | Te Kéfa | Ramela | Te Málo II | Mallo II | Te Nàli | Nali |
| 3 | Te Bapóeme | Patipeme | Te Wí | Awi | Te Múngtang | Muntang |
| 4 | Te Yálu | Membilo | Te Hùepa | Palora | Te Hùepa | Palora |
| 5 |  |  | Te Kóemo | Kemo |  |  |
| 6 |  |  | Te Yálu | Membilo |  |  |
| 7 |  |  | Te Tangpúto | Tangputo |  |  |

In each case the first listed clan is the largest clan in that village, and the clan from which the Ke barí (ondoafi / korano / village head) is chosen. It is also worth noting that there are two clans which are found in two villages: The Membilo clan is found in both Skou Yambe and Skou Mabo, and Palora is found in both Skou Mabo and Skou Sai. Some of these clans are transparently recognisable in the clan names of other villages occupied by speakers of related languages from the Skou family to the east (see 1.4). The Kemo clan, for instance, shares the same history as the Imo clan of Leitre. In the main, however, the clan names found in villages of the west coast of Vanimo do not bear any close relationship to those found in Skou. Each clan is associated with a particular set of origin myths, and has a particular bird species as its totem. In addition, there are dietary restrictions on members of each of the different clans. Some of this information, for one clan, can be found in text 20 in the appendices.

The land to the south-west of the Skou villages is now part of a large transmigration settlement camp in the area, named Koya. A steep range of hills runs from Tanjung Jar southeast and then parallel with the coast, peaking at approximately 375 m above sea level, runs from the cape at Tanjung Jar 8 km west of Skou Yambe to a point approximately 3 km south of Skou Sai. The transmigration lands of Koya lie south of this small unnamed range. The question of the ownership of this land, and so which group of people are the rightful recipients of a conceived suit for compensation from the government for their acquisition of it, is the source of some contention between the clans of Skou Yambe and the Elseng people, an inland group whose northernmost range abutted on the southern border of the Skou in the region of the modern Koya transmigration site. In the late 1990s some secondary settlement from Koya was made along the road that runs from Koya to the Papua New Guinean border, approximately one kilometre south of Skou Mabo and north of this small range of hills, and indisputably inside the area of that village's gardens and hunting domain. This is the continuing source of much contention between Skou people and the newer settlers. To the east a straggly forest occupies the land between the swamps that are found north of the Tami river and the narrow coastal strip behind the beach.

Despite the proximity of the transmigration camp at Koya, and the visible proximity of the city of Jayapura and its outlying suburbs from the beach in front of any of the Skou villages, life in Skou has not drastically changed compared to the way it proceeded, say, fifty or eighty years ago. The concreting of a market area in 2002 only 4 km from the turn-off to Skou, and a roughly equal distance from Koya Timur, has not changed anything, since the location is not convenient to anyone, either Skou people or Koya transmigrants. The presence of a number of Bugis men growing coconuts from plantations near the Skou villages in the late 1970s (they paddled the produce to Hamadi market, between Tobati and Jayapura, once a week) left a legacy of several mixed-blood children, but no other lasting social impacts. The Protestant church (the Gereja Kristen dalam Irian, or $G K I$ ) is active in the area, as it was since before the Second World War, with most people at least nominally adhering to that faith. In recent years the Pentecostal movement has become strong in some parts of the Skou-Mabo community (though still a vastly outnumbered minority), to the consternation of the GKI adherents, who have burned down at least one church the Pentecostalists have built.

Map 2. The Skou villages and other geographic features west of the Tami River


Agriculture is dominated by the work needed for the cultivation of hòe sago, which grows in a semi-wild state in the interior between the Skou coast and the Tami river, in those areas that have not yet been affected by Indonesian settlement. This is an area of poor soil due to frequent inundations of the Tami river, which result in fresh-water swamps along the course of the river, and mangrove near the coast (this changes on the east side of the Tami, where the land rises sharply to the border range). (Cheesman (1938: 74) records that 'Sago does not monopolise the swamps, there are many other kinds of trees as well, but no lofty ones; other palms, Pandanus and small scrub.') Skou people weed around the growing sago trees, and when they mature these are processed, with the resulting starchy flour then carried back to the villages for consumption, most popularly in the form of a jelly-like porridge or soup, hòe, sometimes dryroasted into a pancake-like food, kóe. Other crops that are gathered from a semi-wild state include ápólè, genemon (tulip) and póweng, gedi (aibika).Some tubers are cultivated, mainly nále native taro, but manúa asiatic taro is also very common, and other tubers such as rángúeke sweet potato and óe yams are also popular.

In addition to this forest-gathering basis of their lifestyle, contact with people from western Indonesia, and their agricultural practices, has increased the range of vegetables grown and consumed in the villages, particularly in Skou-Mabo and Skou-Yambe. This extends to several varieties of póní cabbage and póí spinach, as well as a variety of fruits, such as péngue mangoes, mandarins, and áue jambu, which complement native ìngno bananas and hang coconuts.

The main source of protein is móe fish, which is caught to some degree throughout the year, most particularly during the feng lang ro east wind season, with a hiatus when the wà west wind is blowing, in the months of November - February, when waves prevent most fishing canoes from being launched. The lack of fish is not a hardship, however, since the bush surrounding the villages is also a source of some animals, especially during this time, and during the fu wa ro west wind season pále pigs are the target of choice, but more commonly táng birds are hunted, and the eggs of the tangwáue bush turkey/mallee fowl are collected. This is partly a reflection of the Skou people's preferences, and partly a reflection of the reduction in wild pú mammal population in the area since the transmigration camps were established, and since logging became a prominent industry in the hinterland east of the Tami river. This merely continues a trend noticed by Cheesman (1938: 74): 'There are plenty of these birds in the forest still, but they are more rare, nothing like the numbers that used to be seen. No doubt they have been made wary by being persistently hunted ...'

### 1.4 Skou in its linguistic context

Skou is the westernmost member of the Skou family. Compared to the other members of this family Skou is somewhat atypical, in terms of both morphological and phonological features (Donohue 2002), but is clearly related to them and not to the languages that now adjoin it to the west and south, which are Sentani family and Border family languages (see table 2). The internal arrangement of the immediately related languages of the Skou family is set out in figure 1 ; this represents the genetic links that apply to the languages in the family, and does not attempt to show the effects of areal diffusion (for which the reader is again referred to Donohue 2002).

Figure 1. The Skou family


Within the closer Skou family, we must recognise a number of innovations that have spread beyond the language in which they have had their start, some of which group Skou with Nyao and Wutung, and others of which group Skou with Nyao, Wutung and Dumo. (Further groupings based on the spread of various diffusing sound changes can also be made: these group Leitre with Dusur, Leitre with Dusur and Dumo, Leitre with Dusur, Dumo and Wutung, and finally Wutung with Dumo and Dusur. See Donohue (2002).) Additionally, two changes have spread to Skou from the unrelated languages to the west, and have gained currency to various degrees in other languages related to Skou. These areal traits that have diffused into Skou are the absence of $/ \underset{T}{ } /$ and $/ \mathfrak{g} /$, and the presence of $[\mathrm{r}]$. For a synchronic description of the Skou language the first of these changes, the loss of the velar nasal, is important in that it explains some of the irregularity involving the first person singular inflection on verbs (see 7.2.2, and Appendix 2). The other changes, while equally wide-ranging in terms of the reorganisation of the sound system that came about as a result of their application, are not so relevant in a synchronic description. They are mentioned briefly here and in Donohue (2002b).

Some of the phonological changes that motivate the subgrouping diagram in figure 1 are given in table 4 ; these changes have been selected for their use in motivating the tree in figure 1. For a more complete assessment of the inherited and areal sound changes, and arguments for the methodology of their separation, see Donohue (2002).

Table 4. Some phonological changes in languages of the Skou family

| Skou |  | Eastern Skou |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | West Coast |  |  |  | Leitre |
|  |  | Border |  | Vanimo |  |  |
|  |  | Nyao | Wutung | Dumo | Dusur |  |
| *t | I | t | t | t | t | t |
| $*_{4}$ | \# | u/i | u/i | u/i | u/i | u/i |
| * ${ }_{\underline{\text { r }}}$ | F | $t{ }^{\circ}$ | ti | d | d | $b$ |
| $*^{\text {j }}$ | $t$ | $t$ | $t$ | 4 | d | 3 |
| *+1 | I | Jir | hl | t | $t$ | t |
| * | f | f | f | $\Phi$ | $\underline{\square}$ | $\underline{1}$ |

The geographic distribution of these six languages is shown in map 3; this map is a compromise between the modern (post 1961) situation and the claimed land holdings of the different ethnolinguistic groups; as such, it would probably fail to please any parties. There are two major differences between the positions marked on this map and the present day. Firstly, there has been a narrowing of the Skou land towards the coast, reflecting the incursion of transmigrants from further west in Indonesia. Secondly, and occurring in approximately the same time frame, we have seen the de facto loss of the land east of the Vanimo headland from the Dusur (Lido) peoples, due to the establishment of extensive squatter settlements on this land. In addition, the language marked as Nyao, and previously spoken in at least three different settlements inland from Skou across the Tami river, is now exclusively spoken by people living at Nyao village in Papua New Guinea. This means that much of the land belonging to this group west of the border is not effectively maintained on a regular basis, though the search for logging royalties has led some Nyao people to plant gardens across the border in recent years. In 2002 a small itinerant camp of 15-20 people was established just east of the Tami River to work with the logging company, though dissatisfaction with wages and conditions means that this is unlikely to last, even though it is the only way the Nyao people have to monitor the company's work). There are, however, no permanent settlements at the time of this writing.

Cheesman (1938), describing the villages between Jayapura (then Hollandia) and Vanimo, refers to Njau and two other, un-named villages. Skou people recognise the names Te Jáwung for modern Nyao, in Papua New Guinea, and Te Húele, Te Nóemo, Te Kófo, and Te Pòeng as villages inland on the Papuan side of the border between Skou Sai and Vanimo. Of course, not all of these names are necessarily contemporaneous: since villages traditionally move around every few years, sometimes keeping the same name and sometimes changing, one settlement may be referred to by more than one name, especially when recalled over five decades of time. The land east of the Tami river and immediately south of the coast belongs to the people of Wutung village, but again there are no settlements on this land any more, permanent or temporary. Wutung land holders do frequently cross the border for routine garden maintenance and harvesting, but do not travel in family groups. South of this strip the land belongs to the Nyao/Sangke people, and the same notes on its occupancy (or lack of) applies here as applies to the Wutung lands. While not accurate to any one time, the map does however, provide an accurate picture of the relative positions of the different languages.

Map 3. The Skou languages


The small Skou language family described above is itself part of a larger genetic grouping of languages that stretch from Skou in the extreme west of its range along the coast and immediate hinterlands of the Serra Hills behind Leitre to Barupu (formerly Warapu), now located inland of Sissano Lagoon, near Aitape in Papua New Guinea. The organisation of these languages, and their relative relationship to the languages of the Skou family, can be judged from figure 2.

Figure 2. The Macro-Skou family
Macro-Skou linkage


Earlier classifications of languages of this part of New Guinea have treated Skou variously as the western-most relative of the languages of the Torricelli mountains (Ray 1919, who lists 'Seko' and the other languages listed in figures 1 and 2 as belonging to the 'Valman' group); as the northern-most member of the Tami group (Cowan 1952: 135), later retracted in Cowan (1957); and as the western-most member of the Vanimo family (Laycock 1973, following suggestions made earlier by Capell (in print 1954, but quoted earlier in Cowan 1952: 136, where Cowan credits Capell with the suggestion in 1950)). The Tami group appears, in the light of later research and further analysis not to be a genetic group, but is perhaps valid as an areal affiliation of languages from a variety of families (Voorhoeve 1971). The extension of the

Torricelli language grouping to include Skou and its relatives is not justified. Capell's, and later Laycock's, divisions are the closest in spirit to the present proposed structure. Laycock lists the following languages and groupings (1975: 851):

Figure 3. Laycock's classification of the 'Sko Phylum'
SKO PHYLUM-LEVEL STOCK:

| Vanimo family: | Krisa family: |
| :---: | :---: |
| Sko | Krisa |
| Sangke | Rawo |
| Wutung | Puari |
| Vanimo | Warapu |

While differing from the classifications presented in figures 1 and 2, certain regular commonalities can be observed, and the differences have explanations. The unit that Laycock terms the 'Vanimo family' corresponds to the Skou family in figure 1. The relationship between the languages in this group are obvious, and because of extreme borrowing of changes from one language to its neighbour, the subgrouping in figure 1 is not immediately obvious (for detailed discussion, see Donohue 2002). The identity of the languages that Capell identified as sharing a common ancestry is, however, not in doubt, and, when compared externally to the other languages in the greater family, shows complete agreement with the present classification. The 'Krisa family' is more problematic, and mainly reflects the paucity of data with which Laycock worked. Where Laycock classified four languages, I list ten, based on a series of walking surveys along the coast and hinterlands between Vanimo and Aitape (Laycock 1975: 849 oddly makes the emphatic statement that 'it seems unlikely that more members of the phylum will be found'). The data from these additional languages has given an insight into the relative relatedness of the speech at different village sites that was not available to Laycock, allowing the identification of Rawo and Puari as being more closely related, along with the other three languages of the Serra Hills group. More detailed surveys of the villages inland from Warapu (now Barupu, in a new village site following the devastation wreaked by the tsunami in 1998) has shown both their internal diversity, and the bridge that Nouri forms with the Serra Hills languages. Krisa, the only language on which Laycock had extensive data, is demonstrably related to the other languages in the second column of figure 3, but given the spotty sampling it is not easy to see that Rawo, Puari and Warapu are closer to each other than they are to Krisa.

### 1.5 Skou as a 'Papuan language'

Is Skou a 'Papuan' language? This begs the question of our ability to identify a 'Papuan' language, indeed of the validity of talking about such a group of languages as if they share something other than geographic proximity. This section shall examine the use of the term 'Papuan' as a typological classification, and determine how well this term can be applied to Skou, and to the Skou languages generally.

The label 'Papuan' has long been understood to be a descriptor for the languages of the New Guinea region that are not demonstrably related to the widespread Austronesian family that is prevalent over most of insular South-east Asia and the Pacific. As such it is not so much an inclusive label, as an exclusive one, and is not really useful in either a typological or a genetic
sense (this point has been stressed by Capell (1940) and Foley (1986, 1998), and others). The label 'non-Austronesian' would then be more appropriate for what is after all merely a grouping based on non-membership in another family, and areal proximity. This label would not be very contentful for any non-New Guinea specialists listening in on a discussion of the languages, since Austronesian languages abut other language families than those in New Guinea. ${ }^{8}$

It is certainly true that Skou does not show many typological linguistic features that can be traced to an Austronesian origin, ${ }^{9}$ and that absence of correspondence provides us with a convenient benchmark with which to gauge the language. I shall draw on Foley (1998) for contrasts between (New Guinea area) Austronesian languages, and the non-Austronesian languages of the same (general) area, supplemented by Haiman (1980), Reesink (1987), de Vries (1993, summarising them) and Donohue (1997) for typical features of 'Papuan' languages. All these authors tend, either implicitly or explicitly, to count the highlands Trans New Guinea family languages as 'typical' exemplars of the New Guinea linguistic stock, which Skou is not either genetically or geographically. ${ }^{10}$ Since most linguists will have the highlands Trans New Guinea family languages in mind as their notion of what a 'Papuan' language should look like, this is then also a convenient benchmark by which to assess the language.

Foley discusses eight properties that we can identify in the phonologies of Austronesian and Papuan languages, some of which provide benchmarks for contrast between Austronesian languages in New Guinea and the non-Austronesian languages of the area. His properties are listed in summary in table 5, explanations and discussions of these features and the Skou languages can be found following the table.

Table 5. Phonology

|  |  | Austronesian | Papuan |
| :---: | :---: | :---: | :---: |
| 1 | Vowels | 5 vowels | 5 vowels $+\boldsymbol{e}$; <br> (also 7-vowel; front rounded) |
| 2 | Places | P-T-K ( $\sim$ C) | P - T- (C/s) - K |
| 3 | Manner | $\mathrm{P} \neq \mathrm{B} ; \mathrm{B}= \pm \mathrm{MB}$ | no pattern |
| 4 | Fricatives | $\mathrm{fv}-\mathrm{s}-\mathrm{V}$ | fricatives equate to stops: <br> $\mathrm{p} / \mathrm{I} / \mathrm{B} ; \mathrm{tr} \mathrm{r} / \mathrm{l} \mathrm{k} / \mathrm{g} / \mathrm{Y}$ <br> few pure fricatives; often just s |
| 5 | Liquids | $\mathrm{r} \neq 1$ | $\mathrm{r}=1$ |
| 6 | Syllables | (C) V | C(C) V C |
| 7 | Stress | $\sigma \sigma^{\prime} \sigma \sigma$ | stress phonemic, unpredictable, |
| 8 | Tone | $\sim$ (tone) | or tone present |

The typical Austronesian language is said to have five vowels ( $f=$ i i $\quad 7 a$ ); Skou exceeds this typologically unexceptional system with its two non-back rounded vowels, in and $\boldsymbol{s}$. While

[^5]unusual, these would be acceptable as unusual, but not unlikely, criteria for the 'Papuan' class. The places of articulation found in Skou could be taken as typical for either set of languages, and the manner contrast (voicing contrast only in bilabials, not involving prenasalisation) is typical of neither, though it is not overly surprising from what we know of universal constraints on the articulation of voicing. The fricatives of Skou are not typical for either Austronesian or Papuan languages, lacking an is. The contrast between two liquids is a feature of the Austronesian languages, as is the simple segmental syllable structure. The short words of Skou make an assessment of the phonological status of stress difficult, but the tone system is more Papuan than Austronesian in its style and pervasiveness (Donohue 1997).

Of the five assessable phonological features, Skou scores two each with Papuan languages and Austronesian languages. We shall now examine Skou in terms of morphologicalproperties; table 6 summarises Foley on the typology of New Guinea Austronesian languages with Papuan languages.

Table 6. Morphology

|  |  | Austronesian | Papuan |
| :---: | :---: | :---: | :---: |
| 1 | type | close to isolating | agglutinative |
| 2 | inflection | little inflectional morph | strong inflectional categories, often fused with TAM |
| 3 | derivation | suffix applicatives prefix causatives reduplicate for intransitive | usually SVCs; <br> derivational morphology usually suffixal |
| 4 | nominal categories | no number or gender on nouns | usually no number or gender on nouns |
| 5 | case | no case, word order strict | case by suffix/enclitic; $\mathrm{ACC}=$ <br> DAT, $\mathrm{ERG}=\mathrm{INSTR}$ or LOC |
| 6 | verbal agr | $\mathrm{s}=\mathrm{V}=0$ | $\mathrm{o}=\mathrm{V}=\mathrm{s}, \mathrm{V}=\mathrm{o}=\mathrm{s}, \mathrm{V}=\mathrm{s}=\mathrm{o}$ |
| 7 | TAM | $\mathrm{s}=\mathrm{TAM}=\mathrm{V}$ | V-TAM, or SVCs |
| 8 | categoriality | precategoriality rife | strict root categories |

Morphologically Skou is closer to isolating than to agglutinative, though recent grammaticalisations have led to some transparent, but significant, increases in morphology. The inflection that is present is not fusional with other grammatical categories, but rather simply agglutinative. There are productive applicatives in Skou, suffixal as predicted for Austronesian languages. The nouns are gendered, though this is not marked on them morphologically, and there is no morphological case on core nouns, as the word order is very strict. Verbal agreement follows the Austronesian pattern, though TAM marking is by serial verbs of suffixal material. Roots follow their categorial labels strictly.

Morphologically, Skou scores five points with Austronesian and two with Papuan, out of seven assessable features.

Additional features from other authors (Haiman 1980, Reesink 1987) that are commonly used to describe Papuan languages can also be added to the above list. These features are:

|  |  | Austronesian? | Papuan |
| :--- | :--- | :--- | :--- |
| 1 | numerals | $\mathrm{n} / \mathrm{a}$ | based on body parts |
| 2 | classification | $\mathrm{n} / \mathrm{a}$ | based on existential verbs |
| 3 | pronouns | $\mathrm{n} / \mathrm{a}$ | reflect $n a \quad k a$ [y]a for 123 SG |
| 4 | verbal types | $\mathrm{n} / \mathrm{a}$ | prevalence of light verbs |

Skou has a highly productive system of light or auxiliary verbs, and also a system of nominal classification which is reflected in the choice of existential verb. The numeral system reflects a complex base-eight/base-twelve system (see 5.7), and does not follow the frequent (for New Guinea) body part or base-two system. The pronouns of Skou, nì mè ke pe in the singular (first and second persons, third person non-feminine and third person feminine, respectively) reflect proto-Macro Skou *Tij, *mi, *kya and ${ }^{*}{ }^{*}{ }^{*} \varepsilon$, respectively.

In terms of these features, Skou is neither convincingly 'Austronesian' nor convincingly 'Papuan'. It should be noted, however, that the Papuan languages that Haiman and Reesink examined in order to arrive at the features they did were exclusively Trans New Guinea family languages, and did not reflect a general areal survey of the New Guinea island or region.

Foley lists only six syntactic characteristics by which Papuan languages systematically differ from Austronesian ones:

Table 7. Syntax

|  |  | Austronesian | Papuan |
| :--- | :--- | :--- | :--- |
| 1 | phrase | left-headed | right headed |
| 2 | clause | SVO | SOV (usually allow OSV) |
| 3 | PP | PREP N | N POST |
| 4 | DP | DET N | no DET |
| 5 | modifiers | N ADJ, N RC | ADJ N, also N ADJ |
| 6 | sentence | S CONJ S | S S; S-SWITCH S |

In terms of syntax, Skou is right-headed at the clausal level, with SOV (=APV/SV) word order and one postposition. There is no determiner in the Austronesian sense, and clauses are linked with a switch reference-like system. The order of adjective and noun does not support a universal right-headed analysis, but rather is N ADJ, both in Skou and in most languages of New Guinea, which is the overwhelmingly common pattern for Austronesian languages. It is also, pace Foley, the most common pattern in the non-Austronesian languages of New Guinea as well (Dryer 1988), and so cannot be counted as evidence either for or against 'Papuan-ness'. Skou scores five out of five Papuan points, for those features which can be assessed.

In total, out of the seventeen assessable features of Foley's, Skou scores a 'nine' in common with Standard Papuan, as opposed to a 'seven' with Melanesian Austronesian, showing that it is clearly not a good exemplar of a 'typical Papuan language'. If we add in the additional four Papuan features suggested by other writers, we find only ten out of twenty one points.

Clearly Skou is not a very good representative of Papuan languages as a whole. It is a good exemplar morphologically of the family to which it belongs, however, as well as having a number of unusual phonological features as a result of being a good distance to the west of the other members of its family. The syntax shows the result of esoterogeny and a response to attrition in the consonant system; many of the simpler systems of the Eastern Skou languages
have been elaborated on in Skou to the point that they no longer represent transparent paradigms. This is most obvious in the verbal paradigms, which are detailed in 7.2 and Appendix 1.

The patterns that are typical for languages of the Skou and Macro-Skou families, in terms of the features that have been discussed above, are shown in table 8. As can be seen, Macro-Skou is not a typical exemplar of a Papuan language family, as determined by Foley (1998).

Table 8. Skou family and Macro-Skou family linguistic features

|  |  | Skou family | Macro-Skou family |
| :---: | :---: | :---: | :---: |
| 1 | Vowels | 8 vowels | 6 vowels |
| 2 | Places | P - T ( $\sim$ C) $\mathrm{K} \mathrm{K}^{\mathrm{w}}$ | P-T-K |
| 3 | Manner | $\mathrm{P} \neq \mathrm{B}$ | $\mathrm{P} \neq \mathrm{B}$ |
| 4 | Fricatives | fsh | fsh |
| 5 | Liquids | 1, no r | 1, no r |
| 6 | Syllables | (C(C) ) V | (C(C) ) V |
| 7 | Stress |  |  |
| 8 | Tone | tonal, nasalisation | tonal, nasalisation |
| 1 | type | close to isolating | close to isolating |
| 2 | inflection | little inflectional morph | little inflectional morph |
| 3 | derivation | usually SVCs | usually SVCs |
| 4 | nominal categories | no number or gender on nouns | no number or gender on nouns |
| 5 | case | no case, word order strict | no case, word order strict |
| 6 | verbal agr | $\mathrm{s}=\mathrm{V}$ | $\mathrm{s}=\mathrm{V}=\mathrm{o}$ |
| 7 | TAM | V-TAM, or SVCs | V-TAM, or SVCs |
| 8 | categoriality | strict root category | strict root category |
| 1 | numerals | base-8 | ? |
| 2 | classification | no | ? |
| 3 | pronouns |  |  |
| 4 | verbal types | prevalence of light verbs | prevalence of light verbs |
| 1 | phrase | right headed | right headed |
| 2 | clause | SOV | SOV |
| 3 | PP | N Post | ? |
| 4 | DP | no DET | no DET |
| 5 | modifiers | N ADJ, N RC | N ADJ, N RC |
| 6 | sentence | S conj S | S conj S |

In this, its own linguistic context, Skou still does not fit very well: it shares only three phonological traits with the Skou family (four with Macro-Skou). Morphosyntactically it is a much more typical exemplar of its family, with all eighteen features in accordance with familial norms. It is just the position of Skou on the western edge of the family that has led to its developing an unusual phonology, partly under influence from the unrelated languages that neighbour it, and a few morphosyntactic twists that are at least partly driven by the phonological changes that have restructured the realisation of some complex morphophonology. In terms of the lower grouping, Skou is a rather aberrant member of the Skou family morphologically, not sharing in several losses of Macro-Skou contrasts that characterise the Eastern Skou languages.

### 1.6 Earlier work on Skou

The first appearance of Skou in the linguistics literature was in reports by Cowan (1952a, 1952b, 1953), followed by a brief list of words in Galis (1955), and a reclassification by Cowan again (1957). Voorhoeve (1971) presented a summary of Cowan's work along with original research, leading to the first detailed look at some aspects of Skou grammar, mainly the phonology and verbal morphology. Since then there have been references to the classification of Skou (Voorhoeve 1975a, 1975b, Wurm and Hattori 1981, Silzer and Clouse 1991). This author has published work that mentions or deals with Skou (Donohue 2000, 2001, 2002), all of which contain information that also appears in this description. I shall examine the contribution that each of these earlier works has made to our understanding of the language, and reconcile them where necessary with the analysis presented here.

Cowan (1952b) surveyed the languages of what was then Hollandia sub-district, basically the region easily accessible from Hollandia (the former name of Jayapura) presenting some brief notes on each language. In the case of Skou this amounts to a short wordlist of 65 items and a sample of basic inflected verbs. The data appears to be accurate, though many of the distinctions that are made in Skou are not noted in the transcription. Cowan notes that Skou has a gender distinction in the third person singular pronouns. ${ }^{11} \mathrm{He}$ also noted the tonal nature of the language, and the fact that the pitch contrasts show both lexical and grammatical information. ${ }^{12}$ The clitic agreement system was noted, but the prefixal agreement system was recorded as being 'strong variations in the root' (1952: 136), ${ }^{13}$ and the alternations of the vowel of the verb root according to the features of the object were listed as being present. All in all, Cowan's materials represent a useful early survey of the language, with little in the way of inaccuracies.

Galis (1955) is a very brief survey of the languages of what was then West Nieuw Guinea, drawing on a variety of wordlists collected by different government officials. The coverage of Skou amounts to only a list of fifteen words and ten numerals. As far as it goes, the material is accurate: the transcription is irregular, and under-represents the phonemic contrasts in Skou, but does not contain inaccurate data. While not explained explicitly, the use of diacritics clearly describes the contrastive pitches of the language, with examples such as (Galis' typography)


## Anceaux' xxxxxxxxxxxxxxxx

Voorhoeve had the opportunity to work with a Skou speaker, and then compare his notes with Cowan's published notes on the language. Voorhoeve presents an accurate picture of the data, and his analysis, albeit sketchy because of the limited data available to him, is excellent, differing from the present analysis only in Voorhoeve's failure to recognise the verbal proclitics (see 7.2.1). Voorhoeve also recognised a contrast between $e$ and $\varepsilon$, and between $\sigma$ and $\sigma$, where the present writer feels that these are best analysed as tonally conditioned allophones of the one phoneme. He noted (1971:53) that "all vowels [may] appear nasalized", which does

[^6]not seem to accord with the data observed here (there are no occurrences of [ї] other than in fast-speech environments, always adjusted in slow speech), ${ }^{14}$ but these are small differences, and quite understandable given the limited time Voorhoeve spent on the language.

Voorhoeve notes that nasalisation can, in at least some words, be attributed to the loss of a nasal consonant between vowels (see 'bird' in table 11 below). While this may appear to be so in the word he cites (táng 'bird'), there might be another explanation for the data he noted. The other example that he cites does not appear to support the hypothesis of nasalisation resulting from nearby nasal consonants. The apparent loss of a nasal consonant most likely represents the appearance of the $n$ - agreement marker on the verb 'be' used aspectually with páng 'chop (PL.P)'. The contrast between Voorhoeve's interpretation of the evidence and the alternativethat presents itself with the benefit of a more detailed morphological analysis of the language is shown in table 9 . We can see that it is in fact a morphological alternation between an verb with an initial $n$ - and one without, and does not represent the allophonic alternation between the sequences $\left[-\operatorname{anc} \varepsilon^{-}\right]$and $\left[-\boldsymbol{a} \boldsymbol{\varepsilon}^{-}\right]$.

Table 9. Explaining 'nasal loss': a reinterpretation

|  | Voorhoeve | Alternative interpretation |
| :---: | :---: | :---: |
| Nasal C | ne penter | $n \in \mathrm{pan}$ ne ti |
| Nasal V | 'We are cutting wood.' te paête | ne pang ne ti <br> t páati |
|  | 'They are cutting wood.' | te pang e ti |

An alternative explanation can also be found for the [ Ea ] ~ [ank] alternation that Voorhoeve recorded for 'bird', shown in table 11 below. I suggest that the first form is the citation form for bird, but that the second, transcribed by Voorhoeve as [täne], represents the response táng ing $a$ 'the bird', which is regularly realised as [tiga] (see 2.2.3), with the nasalisation on the vowel of 'bird' easily confused with non-phonemic nasalisation induced by the following nasal consonant.

Voorhoeve also noted that the labio-dental fricative 'alternates freely with [pf] (in word initial position', which is not attested in the Skou I have heard. This might represent a genuine change in the language, perhaps under the influence of Malay/Indonesian (see 1.7 for evidence of change in the allophones of other phonemes, possibly as a result of Indonesian influence). Voorhoeve (1971:55) noted the presence of word-final \cline { 1 - 1 } and 1 , and noted that Cowan has final $n$ in his data. These consonants have never been noticed in the Skou that I have heard.

Voorhoeve also noted the slight initial preaspiration that can accompany a sonorant, which while not very widespread can be evidenced in the transcriptions provided by other writers (see table 11 and the discussion in 2.2.1.5), but which I have not heard from any speakers. One point of Voorhoeve's presentation that is definitely refutable is his assertion that 'perfective aspect is indicated by a particle ja preceding the subject pronouns and the past tense form of the verb', citing examples such as:

[^7]| ASP | SUBJ | OBJ | V |
| :--- | :---: | :---: | :---: |
| $j a$ | te | $\emptyset$ | tà̀, |
| PERF they  <br> 'They have eaten.' ate |  |  |  |

While the translation of the sentence is correct, the sentence can be better analysed with the putative 'perfective' marker interpreted as a generic object, as below. This object does not precede the subject pronoun, but simple the (doubly) inflected verb, and so appears in the normal position for an object in this SOV language

|  | SUBJ | OBJ | V |
| :---: | :--- | :--- | :--- |
| $(1)^{\prime}$ | $\emptyset$ | $Y a$ | te=t-ang |
|  |  | thing | 3PL=3PL-eat |

The fact that the generic object marker can also be used in non-perfective aspects, such as Ya te tang tang 'They are going to eat.' supports the analysis presented here. Apart from these qualifications, Voorhoeve's short notes and speculations (1971:59) on syntax in Skou are all borne out by the present author.

No further published materials are available on Skou, and the only unpublished materials that I am aware of are some wordlists collected by Greg Kalmbacher and Mike Moxness, both of the Summer Institute of Linguistics, in 1985. These survey lists contain 210 items, and do not attempt to analyse the sounds of the language, but do accurately represent them, particularly the list collected by Moxness. Again, there is little in this list that is not reconcilable with the material in the current description (see 1.7).

Looking further afield, but within the family, there is little published material on the other languages of the Skou family. Ross (1980) presents a sketch of the Dumo language, ${ }^{15}$ which represents in many ways a subset of the grammatical patterns found in Skou.

From a Dumo perspective, most of the differences between it and Skou involve the lack of consonant clusters in Skou, the differences in the segmental phonologies of the two varieties, and the case marking system in Skou. The elaborations of multiple agreement found in Skou are not a feature of Dumo, nor is the gender system. Some of the more salient differences are listed in table 10.

[^8]Table 10. Skou and Dumo compared

|  | Skou | Dumo | Comments |
| :---: | :---: | :---: | :---: |
| 1. Stops | pbtjk | btid | Dumo lacks palatal or velar stops; Skou lacks voicing in the alveolar or velar places |
| 2. Fricatives | $\mathrm{f}_{\mathrm{h}}$ | ¢ ${ }^{\text {s }}$ | Skou lacks an s; Dumo lacks the glottal fricative ${ }^{16}$ |
| 3. Sonorants | rl | 1 | Skou has added r |
| 4. Syllable pitches | high, low, fall | high, low, fall | identical, with identical tone sandhi (though see 2.3.1) |
| 5. Lexical clusters | none | pl blml [ | Skou lacks clusters |
| 6. Case | ergative, instrumental | none | Dumo lacks case |
| 7. Agreement | clitic, prefix, vowel | prefix, (vowel) | Skou has more elaborate agreement |
| 8. Classification | 2 genders and 2 classes | 2 classes | Skou shows a more elaborate system |
| 9. Word order | SOV OBL | SOV OBL | identical |
| 10. Valency change | applicative, (passive) | none | Dumo has lost the applicative |

We can see that, while more closely aligned to Dumo than to the languages to its west in terms of typological profile (compare with table 2), Skou is considerably different to Dumo, and the other languages of the Skou family (see also figure 1).

Some limited materials on Vanimo (Dusur), can be found in Capell (1972), and more distantly an I'saka (Krisa) grammar sketch by Donohue and San Roque (2004) presents basic materials on that language. Material on other languages of the Skou family are not at this date available in published form, though it is perhaps worth noting that Dumo is one of the least 'precocious' of the languages in the family, with the least number of individual-identifying features. The Border languages, Wutung and Nyao, both show degrees of complications in their use of verbal collocations (see 7.8), and both Dusur and Leitre have preserved some archaic phonological features not found in the other languages. More distantly, both the Piore River and Serra Hills families have their own peculiarities, which are beyond the scope of the present volume to exemplify.

### 1.7 Recent changes in Skou?

Although only a small amount of earlier work documenting Skou exists, these materials show considerable differences, based mainly on the wordlists available (the largest area in which these materials overlap). There is just enough material in Cowan's, Galis' and Voorhoeve's work to allow us to judge what appear to be some changes in the language which have occurred in the last fifty years, as well as to show up some differences in the transcribers. Wordlists taken, from the same informants that I have worked with, by members of the Summer Institute of Linguistics in 1985 show some slight differences with the results of lexical work carried out

[^9]in 2000－2002，and are also reported here．Essentially，however，all the sources agree to a great extent．

Only a few differences are worth noting，for their phonological consistency across several lexical items．Compare the following words，given in the transcription of the sources since the 1930s（Cowan［1952］is based on materials collected in the 1930s），and their phonemic forms as recorded at the end of the $20^{\text {th }}$ century．The sources from Voorhoeve onwards all have a much greater inventory of words，but only those words that can be compared with the earlier sources（and a couple of other interesting ones）have been listed here．Voorhoeve（1971），for instance，lists 82 lexical items，which we may note parenthetically is somewhat higher than Laycock＇s 1975 estimate（Laycock［1975：851］states that there are＇some forty items＇）of lexical items that can be found in that source．

Table 11．Lexical materials on Skou over five decades：an short sample

|  | Cowan，Galis $\text { '1952', } 1953$ | Voorhoeve $1971$ | $\begin{gathered} \hline \text { Moxness } \\ 1985 \\ \hline \end{gathered}$ | Kalmbacher 1985 | Donohue 1998＋ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ＇head＇ | － | rö̀be | xT̛̃öbì／fữöbì | ＇lizibi | mbi |
| ＇bird＇ | tân | tigu～tana | tas | ter | tis |
| ＇wing＇ | fâ | － | fax： | 蛸 | fig． |
| ＇man＇ | teba－lên | ba，kébane | bailbale | ba／ba＇le | belz |
| ＇coconut＇ | hâh | － | － | － | hat |
| ＇stone＇ | wung | wii | wif woun | wor | wii |
| ＇rain＇ | fuh | ifo |  | ¢ ${ }^{\circ}$ | fu |
| ＇sun＇ | ráh | rax | for | 號 | ram |
| ＇fire’ | （g）ráh | ra | － | － | ra |
| ＇canoe＇ | tàng | － | － | － | tig |
| ＇arrow＇ | tâ | － | － | － | ta |
| ＇black＇ | － | nembi | 1 mabì | ＇lembi | 1 Ffi |
| ＇two＇ | hintung | Jinto | hiltữ | hïtoì | 〕intoib |

There is a great degree of congruence between the different recordings of the same lexical items，as would be expected for wordlists taken over a relatively small period of time in a small， stable population．Several factors lie behind this：firstly，the Skou people speak a coastal variety of Papuan Malay which is not too difficult to understand；this，as any field linguist who has struggled through monolingual elicitation or a semblance thereof will understand，would make wordlist elicitation much more reliable as well as more comprehensible．Secondly，the persons taking the word list have all been adequately prepared in Malay or Indonesian，and so are qualified to interpret the responses of the informants，and to engage in a dialogue，rather than just a question and（perhaps）answer session．Finally，it seems that in at least some of the iterations of wordlist elicitation the same informant has been used．${ }^{17}$

The following differences are found：
－Galis has several words with a final $h$ ，$n$ or $n g$ ；the final $n$＇s and $n g$＇s all correspond to a nasalised vowel in the speech that I have heard，often in

[^10]combination with a circumflex over the preceding vowel (see 'bird' and 'man'). The circumflex ${ }^{\wedge}$ alone is enough to indicate nasalisation, as in 'wing' and 'coconut', but can also be interpreted as marking a falling tone, as in 'arrow'. The appearance of a final $h$ is associated with either nasalisation or the presence of an initial $r$. The aspiration that Voorhoeve notes for initial $r$ 's in Skou is indicated by Galis through this final $h$, and by the transcription (g) in 'fire', presumably representing an optional initial velar fricative (the grapheme $\{\mathrm{g}\}$ being used to indicate this sound, $[\mathrm{x}] \sim[\mathrm{y}]$ in Dutch).

- The Anceaux lists (Smits and Voorhoeve 1994) show this same preaspiration of a number of words which now simply show an initial sonorant.
- Voorhoeve sometimes records an nin where other sources have an l. In both the examples from table 11 above, 'man' and 'black', the sonorant occurs preceding a nasalised vowel. This is most likely simply an extreme application of the rule of nasalisation spreading to a lateral in the same syllable that has been observed in modern Skou. It is likely that Voorhoeve's informant was simply a speaker who applied this rule more thoroughly than most. See 2.2.1.4 for further discussion on the phonetics of laterals in this environment in Skou and the likelihood that this rule was productive historically as well.
For a historical view with greater-depth we can, of course, also examine Skou in the light of the reconstructable history is has in its descent from proto-Skou, or from the earlier MacroSkou linkage. This is beyond the scope of this current introductory section, though exactly this is reported in Donohue (2002b).


### 1.8 An brief summary of Skou grammar

We have surveyed some features of the phonology and morphosyntax of Skou in 1.3, when discussing the degree to which Skou fits the typological profile of most languages of the New Guinea area. In this section we shall briefly review these points and introduce other typologically salient features, providing a 'road-map' for the rest of the grammar where further details of the language's features can be found. A slightly more detailed, and data-driven, summary of Skou grammar can be found in chapter 3.

### 1.8.1 Historical environment

The Skou people, because of their place on the coast immediately to the east of Humboldt Bay, have been in contact with first Malay(-speaking) traders who came looking for bird of paradise, and later Dutch-speaking administrators, for over a century. In that respect there are a number of loan words from these languages in Skou, and most likely a number of as-yet untraced loans from one or more of the indigenous languages of the area, especially Tobati (see 1.6.2).

### 1.8.2 Sociolinguistic environment

Due to their having a long history of contact with both the ethnic group to the west in Yotefa Bay, Tobati-Enggros, and the other Skou family language-speaking villages along the coast to
the east such as Wutung and Vanimo, there has always been considerable in- and out- marriage within the Skou ethnic group. This means that, despite their being only three Skou villages, located very close to each other along the one stretch of coast, there is a history of looking outside their own cultural group for trade and other relations. This has led to considerable change in the Skou language, as well as a great deal of cultural import and export. More details have been presented in 1.3 and 1.4, and to a lesser extent in 1.2.

### 1.8.3 Phonetics and Phonology

The phonological system of the language will be described in more detail in chapter 2 , but is presented here in outline form as a summary. Segmentally, the language shows the contrasts described in table 12:

Table 12. The Skou segmental system

| $\underline{F}$ | t | k |  | i | 4 | 11 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $b$ | $\mathrm{j} \sim \mathrm{g}$ ¢ |  |  | 0 |  |  |
| m | n |  |  | $\varepsilon$ |  | $\square$ |
| f |  |  | $\mathrm{h}_{1}$ | a |  |  |
|  | T17 | W |  |  |  |  |

Phonotactically only (C)V syllables are allowed; overwhelmingly CV, and not simply V, are found (approximately $5 / 6$ of all monosyllabic roots have a consonantal onset). This leads to word shapes with few interactions between segments. These segments are realised with allophones that are in the main unexceptional, but with some interesting developments in terms of dissimilative processes (2.2.1.1, 2.2.1.8), and a range of interesting co-occurrence restrictions (2.4). Although analysable as a system with independent onsets, rimes, and suprasegmental elements, there are clear prosodic units greater than any of these units that determine the possible syllable shapes. In addition to these segments, nasalisation is contrastive on all the vowels except $/ \# /$, and pitch is contrastive at a word level. While nasalisation is contrastive on each syllable rime, there is considerable spreading of nasalisation to the right unless an oral non-sonorant (more explicitly, a consonant other than $\mathbb{F} 5$ or $A$ ) intrudes. This is described in 2.3.2.

Tone is present at the word level, but syllable-level constraints apply to limit the realisation of certain tonal contours on monosyllabic words. Five word tones (phonetically H, L, HL, LH, and LHL) are thus realised on monosyllabic words as [ ${ }^{-}$], [-] and [ $\backslash$ ], with the rising and the rise-fall pitch contours not found on single syllables. This is described in detail in 2.3.1. The HL melody shows additional contrasts depending on the placement of an accent, which results in the prelinking of the tonal units to the designated syllable.

### 1.8.4 Morphological profile

There is evidence of Skou having been a language at the isolating end of the spectrum, with little derivational or inflectional morphology, but has recently moved to a more inflecting system, with considerable head marking of both pronominal agreement and, on verbs, aspect, and also a developing case system. The most developed morphology is that on verbs, where subject agreement is more than just universal, and vestiges of an object inflection can be found
in some verbs. Applicatives are the sole valency-increasing mechanism in the language, and there is an apparent passive construction in the language, unusual for its area.

### 1.8.5 Syntactic patterns

Skou has OV and SV patterns (Dryer 1991). When, rarely, both nominal positions are filled, this is typically realised as a clause with SOV order (see 3.1). Skou shows most of the typological profile that can be expected for a language in the New Guinea part of the world, including head-initial noun phrases. The tables in 1.5 have already shown much of this basic information when comparing Skou with Foley's 'generic New Guinea' profile.

Variation in the clause is found in three main areas:

- there is a pre-sentential topic position (4.2);
- low-affect Ps may appear postverbally, in the place normally reserved for NPs with goal properties (5.4);
- negation forces a re-structuring on the clause in many cases (chapter 16).
- there is an apparently passive construction, with extremely restricted occurrence, which encodes the patient as $S$ and an agent as an optional oblique (chapter 13).
These, and many other unusual features of Skou syntax, are described in many of the following chapters, including $3,4,7$, and 18 .


### 1.8.6 Semantics

As with many languages of New Guinea, there are many lexicalised items which are composed of two or more independent lexical entries, with non-compositional semantics. These are mainly described here in the section on adjunct nominals. The nominal classification system is another manifestation of the overt marking of semantic categories in the syntax, and the kinds of multiple senses of many words, especially those used in the kinship system, are also indicative of a complex set of culture-specific semantic correlations.

### 1.8.7 Lexicon

The lexicon of Skou shows, not surprisingly, a predominance of words that reflect either protoSkou lexical items, or else words that can be phonotactically and phonologically plausibly assigned to proto-Skou, even though they have not yet shown cognacy in other related languages. A selection of these words can be found in the wordlists in appendix 1.

In addition to this native lexicon, we can recognise a number of loans from languages with which Skou has been in contact. These include Dutch, local varieties of Malay, and Tok Pisin. There are probably also a number of words that find their origin in the languages related to Mbo (Kilmeri), Elseng (Morwap), Tobati and Sentani, but since lexical materials on these languages are scarce little can be said for that possible connection. Some examples of words from the three languages that we can examine in detail include the following (with no semantic adaptations).

## Dutch

| oto | < auto [0itor] 'car, vehicle' |
| :---: | :---: |
|  | Malay |
| kurù | < guru 'teacher' |
| kopi | < kopi 'coffee' (< Dutch koffie) (rarely used; more common is simply pa tá (see below) for both 'tea' and 'coffee') |
| lémong | < lemun 'lemon' |
|  | Tok Pisin |
| tàngmio | < tamiok 'axe' (ultimately < English tomahawk) |
|  | Hokkien? (Southern Min Chinese) |
| (pa)tá | < ta 'tea (also by extension: coffee, hot drinks)' |
|  | Unknown? (Pan-New Guinea; locally, [zajakai] in Tobati, Sentani) |
| rabáka | < sa[b/v]aka 'tobacco' (ultimately related to 'tobacco') |

It is more than likely that we would be able to identify more lexical material from nearby languages that have been shared with Skou if we had a greater lexical corpus from the languages of the Humboldt Bay region, and so would perhaps be able to identify more nongenetic linguistic influences on the language. Since there is evidence for extensive linguistic influence from the western languages to Skou (Donohue 2002) in terms of the sound changes that have been reconstructed to account for the modern distribution of correspondences, it is likely that more detailed lexicographic work in the area will eventually reveal a large number of borrowed lexemes as well.

One interesting result we can obtain from examining these loanwords and their phonological adaptation into Skou involves the treatment of stress, tone, and voicing values in the source languages. As will be seen in more detail in the next chapter, voicing places a very restricted role in Skou, but the presence of voicing in the source languages affects the assignment of tone in Skou. This is discussed in more detail in 2.4.1.

## 2 Phonology

The phonology of Skou involves two different suprasegmental tiers and an array of consonants and vowels with somewhat unusual properties, both allophonic and distributional. None of the segments or suprasegmental tiers are of themselves unusual, but they interact in several interesting fashions. The following sections detail the phonotactics and segmental phonology first, followed by a lengthy discussion of the tonal and nasalisation systems in the language. This is followed by a second examination of phonotactic constraints, taking into account both segmental and suprasegmental conditions. The chapter concludes with a discussion of orthographic choices, and the problems in identifying the nature of a tone system when tone sandhi masks other distributional factors.

### 2.1 Phonotactics

Skou is phonotactically uncomplicated at a gross level. The syllable in Skou does not allow for complex onsets, nor any segment (consonant or glide) in the coda. The rime may be nasalised (shown here as ' N ', in brackets because this feature is optional), and contrastive tone is present (shown as ' T '). The shape of the syllable is as follows:

$$
\sigma \rightarrow(\mathrm{C}) \mathrm{V}+\mathrm{T} \pm \mathrm{N}
$$

That is, a syllable consists of a vowel, a choice of pitch contour (high, low or falling), and furthermore may optionally begin with a consonant. The rime is specified as displaying nasalisation on the vowel, or remaining oral.

Although the template above allows for both CV syllables and syllables consisting solely of a V, the CV structure is by far the more common, with only approximately $10 \%$ of syllables lacking an onset, irrespective of their place in a word. Owing to the lack of complex onsets, or any codas, there are no sequences of consonants in Skou, and sequences of two vowels are syllabified as two separate syllables, each with their own timing and possibilities for pitch choice. (Historically a range of complex onsets was possible, and indeed many complex onsets are preserved in all other Skou languages except Leitre, which has also reduced CC clusters to monoconsonantal onsets, though by a different process of simplification to that found in Skou. For further information see section 1.6, particularly table 10, and Donohue (2002b) for a more detailed discussion of historical phonology in Skou and the other Skou languages. See, however, 1.7.) The one exception to this generalisation is discussed in 8.2.2. This means that no non-phonemic glides in codas are formed. Most words are only one, or at most two, syllables long. The relative frequencies of roots of different length are given in table 13, the data set being taken from a random sampling of a dictionary file. Only slightly more than half the free roots are monosyllabic, but less than $10 \%$ consist of three or more syllables, and this count
includes words which are recognisably multi-morphemic, though constituting a single lexical item, such as the names of many animal species (móehábá 'whale', for instance, is composed of the generic móe 'fish, water creature that swims' and the specific hábá 'whale'). If these words were to be reclassified, then the proportion of one and two syllable roots would rise significantly.

Table 13. Length of all words

| Words | $1-\sigma$ | $2-\sigma$ | $3-\sigma$ | $4-\sigma$ | $5-\sigma$ | TOTAL | \%AGE |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| TOTALS | 256 | 193 | 45 | 2 | 1 | 497 | 100 |
| \%AGE | 52 | 39 | 9 | 0.4 | 0.2 |  |  |

I shall deal with the segmental phonology of Skou based on the syllable, since there are not any restrictions on the segments found in the second or third syllable of a word that do not apply to the first syllable. Furthermore, there are no linguistic processes that refer to foot-level units rather than syllables, excepting stress (2.3.2.3). Similarly, the identity of the segments in one syllable of a word does not appear to influence the choice of phonemes in other syllables of the same word, though certainly allophonic differences do exist, mainly suprasegmentally. There are not enough examples of four or five syllable words for us to be able to draw significant conclusions about any possible restrictions. Following the discussion of the suprasegmental features of Skou phonology we will return to the subject of phonotactics, discussing co-occurrence restrictions.

### 2.2 Segmental phonemes

There are twenty segmental phonemes in Skou, seven vowels and thirteen consonants. Both the arrangement of the vowels and the consonants are unusual typologically, and are described in this section. Their interaction with the suprasegmental features of nasalisation and tone is discussed in 2.4 , following a discussion of those features in 2.3.

### 2.2.1 Consonants

The thirteen consonants of Skou show a rather unusual arrangement, the result of competing areal changes and abrupt historical repairs effected to recover from these changes (Donohue 2002b). Most notable is the almost complete absence of contrastive voicing in the system. Unusual, both for New Guinea generally and for the Skou family, is the presence of two nonnasal sonorants, both $l$ and $r$. The absence of ans, either phonologically or phonetically (except in one or two suspected loanwords), is also unusual, both cross-linguistically and in the Skou family.

Table 14. The consonants of Skou

|  | Bilabial | Labio-dental | Alveolar | Palatal | Velar | Glottal |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Voiceless stop | $\mathrm{F} \sim \mathrm{P}^{\text {wr }}$ |  | t |  | k |  |
| Voiced stop | b |  |  | $\mathrm{f} \sim \mathrm{g}^{\mathbf{i}} \sim(\mathrm{f})$ |  |  |
| Fricative |  | f |  |  |  | h |
| Glide / Affricate | w |  |  | (j) $\sim$ ¢ ${ }^{\text {j }} \sim \mathrm{dzj}$ |  |  |
| Lateral |  |  | 1 |  |  |  |
| Rhotic |  |  | r |  |  |  |
| Nasal | m |  | n |  |  |  |

The phonemes conform closely to the IPA values typically associated with the symbols used, with little variation other than erratic aspiration which is heard weakly and intermittently with the voiceless stops, typically word-initially but also occasionally heard word-internally. Of the consonants listed above, only the voiceless bilabial stop, the labio-velar glide, the two palatal consonants and the non-nasal sonorants require extensive comment, which can be found in the sections following.

In addition to these sounds, there are also two known occurrences of an [3] that cannot be assumed to be an allophone of one of these listed phonemes (see 2.2.1.5). These words, sangbíki 'pumpkin' and so 'well then', are both of (highly) suspected non-Skou origins, but they might presage the return of an $/ \mathrm{s} /$ phoneme to the language.

### 2.2.1.1 /p/

The voiceless bilabial stop has two allophones, a plain $[\mathrm{p}]$ and a rounded $\left[\mathrm{p}^{\mathbb{W}}\right]$. The unrounded variant is the most common allophone, heard in all environments and from all speakers. The rounded allophone is heard only from older speakers, and is found only preceding non-round vowels (see 2.2.1.8 for examples). It cannot thus be described as assimilation or dissimilation, but rather is more to do with the realisation of rounding on a syllable containing the $\mathbf{T} /$. When the rime realises this rounding, then it is not found on the stop, but if there is no rounding in the rime (that is, the rime consists of an unrounded vowel), then the rounding is realised on the onset.

Table 15. Allophony of $\mathbf{~} \mathbf{q} /$

|  | Allophone | Environment |
| :---: | :---: | :---: |
| ¢/ | [ p ] | / __\#, ¢, a, u |
|  | [ $\mathrm{p}^{\text {wr }}$ ] | / _ i, e, a |

The rounding effects on a $\mathbf{~} \mathbf{T}$ / the precedes an unrounded vowel are perhaps more accurately represented as $\left[{ }^{[ } \mathrm{F}^{\mathrm{w}}\right]$, since there is a noticeable $\left[{ }^{\mathrm{w}}\right]$ off-glide to any preceding vowel. For instance, hopa/ 'earlier' is heard as [ $1 \mathrm{Br}^{\mathrm{W}} \mathrm{p} \mathrm{ma}$ ], with rounding audible on both sides of the plosive. Here the unroundedness of the following $[-\mathrm{a}]$ provides the environment for the rounding of the $/ \mathbf{q} /$, which is then in addition heard on the preceding syllable.

A similar dissimilation, not motivated by any obvious articulatory factors, is found in the Balig varieties of Bontoc, in the northern Philippines. In this language consonants palatalise before the low vowel $\mathrm{m} /$, but not before high vowels (Lawrie Reid, pers. comm. 2002). Similarly, Blust (2000: 307) notes that Reid's (1971) data on Kakiduge:n Ilongot 'shows
raising of *a to a high central vowel (presumably [i] -MD) after voiced construents (obstruents? -MD ) other than velars', suggesting a similar dissimilation for the feature [high] in the syllable.

Another interesting fact about the voiceless bilabial stop is that, in the speech of some Skou Mabo people, it is frequently omitted in discourse: in running speech it is not unusual for a/ $\mathbf{T}$ / to be omitted, especially at the beginning of a clause. For instance, in the following segment from a text the proclitic on the verb (in bold) was pronounced without the $/ \mathbf{p} /$ by the speaker giving the text:


$$
\begin{equation*}
\ldots \text { rángléng }=p a, \quad(\boldsymbol{p}) \boldsymbol{e}=\boldsymbol{w}-\boldsymbol{a ́}=\boldsymbol{k} \boldsymbol{o} \quad \text { ránglén } g=p a, \ldots \tag{1}
\end{equation*}
$$

afternoon=INSTR 3SG.F=3SG.F-pound=OBV afternoon=INSTR '.. until afternoon, she pounds (it) until it's afternoon, and then ...'

While this allophone is not common, it does occur frequently enough to be noticeable when listening to people speaking quickly. Skou speakers seem oblivious to this dropping. The implications this has for the featural specification (and underspecification) of the Skou segments will be taken up in 2.2.2.1.

### 2.2.1.2 /b/

The only unambiguous voiced oral stop, the bilabial, is usually realised simply as [b], but is occasionally heard as [ $\mathbf{F}]$ when intervocalic in a word or a compound. One example of this is [teparpubi] for /tebapubi/ Te Bapúbí 'Skou Sai'. This is, however, exceptional; overwhelmingly, $[\mathrm{b}]$ is heard in all positions, with [tebepubi] more common than the lenited form.

### 2.2.1.3 /w/

In addition to the common $[\mathrm{w}]$ allophone the labio-velar glide $/ \mathbb{W} /$ displays one unusual allophone, a rounded voiced velar stop $\left[g^{* T}\right]$, when it is preceded by a nasalised vowel. The stopped allophone is more common when the pitch rises from a low to a high level over the two syllables, as can be seen in the examples following. The first three examples in table 16 do not show an upstep in pitch from the first (nasalised) syllable to the second, and also do not usually show prestopping of the $/ \mathbb{W} /$. The following three words are all characterised by an upstep in pitch, and a not unusual stopped allophone of $/ W /$. (For the prenasalisation of the pre-stopped w , see 2.3.2.1.)

Table 16. Pre-stopped allophones of /w/ following V

| Pitch |  |  |
| :---: | :---: | :---: |
| [\|- \] |  | 'lamp' |
| [ ${ }^{-}$\] |  | 'tern' |
| [\|---] | [rawam]; \#[räpman] | 'axe' |
| [ ---] $^{-}$ |  | 'hermit crab' |
| [ [---] $^{-}$ |  | 'bush turkey' |
| [ $]^{--}$] | [tatprato] ~ [tawato] | 'Cape Jar' |

The tendency to pre-stopping suggests either a consonantal origin for the nasalisation on the vowel (as suggested by Voorhoeve 1971 - see 1.5 for a discussion of some problems with this analysis), or a more stopped origin for the $/ \mathrm{w} /$. Given that proto-Skou had a $*_{\mathrm{g}}{ }^{\mathrm{w}}$ phoneme (Donohue 2002), since lost in Skou, this might reflect the reintroduction of that phonetic sequence to some extent. Regardless of these diachronic speculations it is clear that $/ w /$ is a phoneme in Skou, and that the major realisation of that phoneme is as a labio-velar glide.

### 2.2.1.4 /m/, /f/, /n/

No special allophony has been noted for these phonemes; these three consonants conform to IPA norms for these symbols, with little if any perceptual variation.

### 2.2.1.5 /t/

The voiceless alveolar stop is almost always realised as a simple stop, $[t]$. Occasionally, when intervocalic and preceding a high front vowel, it is heard as a fricative [ 3 ]; this seems to occur more frequently when the syllable is low-pitched (though the paucity of data makes this an impressionistic, and not statistic, observation). This is found in the speech of all ages of Skou speakers, and in all cases is a very infrequent allophone, which, if pointed out to someone, will inevitably result in either denial that an [ 3 ] was produced (if it occurred in their own speech), or else condemnation of the speaker as someone who cannot speak the language 'properly'. In any case, it is a highly infrequent allophone, which nevertheless is found scattered about the language.

Some examples of words that have been heard with alternations between [ t ] and [ 3 ], and some other words that have not been observed with an [3] because of the wrong pitch environment.

Table 17. Fricativisation of /t/

| Phonemic form | Pitch |  | Phonetic form |
| :---: | :---: | :---: | :---: |
| Mati' | HL | 'new' | [nati] ~ [nasi] |
| /fatir | HL | 'hut' | [fati]; \# [fasi] |
| Matid | FL | 'coconut rope' | [häti] ~ *hassi] |
| (bati, | LH | 'devil, demon' | [bati] ~ *[basi] |
| (tatio | HH | 'cicada' | [tasizi]; *[tasic |

The fact that even a word like hàngti 'coconut rope' never shows an alternation might mean that the nasalisation on the preceding vowel is also a (negative) conditioning factor in the realisation of the [3], but the infrequency of this allophone makes this speculative.

Another, and even more rare, allophone of $/ \mathrm{t} /$, is found word-internally preceding a $\mathrm{m} /$, provided that the preceding vowel is not rounded. We might formalise the conditions governing this allophone as
(2) $\quad \mathrm{t} / / \rightarrow\left[\mathrm{t}^{\mathrm{W}}\right] / \mathrm{V}_{[- \text {round }]} \ldots \mathrm{u}$

In this environment the $/ t /$ is very strongly rounded, to the point that it is not difficult to perceive the sound as a $[\mathbf{r}]$. Some examples of words that do and do not show rounded allophones are shown in table 18.

Table 18. Rounding of /t/

| Phonemic form | Phonetic form |  |
| :---: | :---: | :---: |
| 'torn' | 'white' | [tund; *[titerw] |
| Male ${ }^{\text {dij }}$ | 'demon' |  |

Both these allophones are rare, partly because of the rather specific conditioning environments that each of them require, and partly because there are also very few word-internal $\mathrm{t} / \mathrm{s}$ in the language.

### 2.2.1.6 ///

The lateral is sometimes realised as a nasalised lateral, $[1]$, when it follows a syllable with nasality. This is most common, and most auditorily prominent, following nasalised vowels, but also occurs to some degree following a syllable with a nasal onset even if the vowel is not contrastively, but merely phonetically, nasalised. This is described in 2.3.2.1. Examples of this allophone are not common, but are listed in table 19.

Table 19. Nasalised lateral allophones

| Phonemic form |  | Nasalised lateral |
| :---: | :---: | :---: |
| /k319 | 'underneath' | [k\%b) |
| malo | '(clan name)' | [melo] |
| Haxlu | 'eagle species' | [tzilu] |
| (tale | 'lorikeet' |  |
| /tizur | 'fishing spear' | [tzalt] |

I have stated above that there are not many unambiguous examples of this nasal spread. It is interesting that sequences of the form $/-\mathrm{VV} /$ or $/(\mathrm{m}, \mathrm{n}) \mathrm{VV} /$ are greatly outnumbered by words with $/-\mathrm{VV} /$ and $/(\mathrm{m}, \mathrm{n}) \mathrm{VlV} /$ or $/(\mathrm{m}, \mathrm{n}) \mathrm{VV} /$, respectively, implying that this rule has some diachronic, as well as synchronic, validity. The fact that in the related language Leitre *l has shifted to $/ \mathrm{r} /$ when it occurs in a syllable with a nasalised vowel is further evidence that this rule was productive at an earlier stage in the language's history. ${ }^{18}$

### 2.2.1.7 /r/

The trill has been reported as displaying preaspiration when it occurs initially. As noted in 1.5, the Dutch linguists Cowan, Galis and Voorhoeve reported this, and wordlists taken in 1985 by members of the Summer Institute of Linguistics also show initial $[\mathrm{h} \sim \mathrm{x} \sim \mathrm{k}]$ preceding an $/ \mathrm{t} /$. This is not prominent in the speech I have heard, some of it from the same informants used by Moxness and Kalmbacher in 1985. For example, the word which is here transcribed as /wobi/
 heard by me as $/ \mathrm{ra} /$, is listed by Galis as ( $g$ )ráh. The initial <g> may seem strange until we recall that $\langle g\rangle$ is the grapheme used for a voiceless velar fricative, $[\mathrm{x}]$, in Dutch. The brackets presumably indicate the optionality of this segment, thus yielding [xa] ~ [ iz ] (Galis uses a final

[^11]<-h> to mark either nasality or high tone, but not, it seems, aspiration). While different in detail from the forms recorded at the end of the 20th century (from speakers of all ages, including the oldest), the relationship between the older and the newer records is clear, and has been discussed in 1.7.

### 2.2.1.8 /j/ and $/ \ddagger /$

The palatal glide shows allophonic variation between a glide, a glide-releaseded alveolar affricate and a glide-released alveopalatal fricative, with younger speakers more likely to select allophones towards the glide end of the range, in keeping with formal Indonesian norms, and older speakers more likely to select allophones that start with a fricative or affricate component, alveo-palatal or palato-alveolar, and then move to a palatal glide. These older-speaker forms, in addition to being presumably more 'original' in Skou, also reflect the more regional allophones of the Papuan Malay palatal glide phoneme [j], a linguistic variety that, with the development of standard language schooling and greater contact with the city, has lost considerable prestige amongst the younger generation. The palatal stop is merging with the glide in the speech of many younger Skou people, but in more conservative speech they are clearly differentiated. The allophony here is driven by dissimilation, with the more back allophones appearing preceding front vowels, especially [i]. This creates maximal phonetic distance between the glide and the stop phonemes in identical contrasts, but also creates similar enough allophones for younger speakers to reinterpret the allophones as all belong to the one phoneme.

Table 20. Allophony of $\uparrow \uparrow /$ and $\emptyset \boldsymbol{\zeta} /$

|  | Allophone | Environment |  |
| :---: | :---: | :---: | :---: |
|  |  | Older speakers | Younger speakers |
| ¢1/ | [j] | / _ front | (unconditioned) |
|  | [ 7 ] | (unconditioned) | (unconditioned) |
|  | [dzi] | (unconditioned) | / _ b back |
| ¢̧/ | [ $]$ | / __ back | n/a |
|  | [ $\left.\mathrm{g}^{\mathrm{i}}\right]$ ~ [ ij$]$ | / _ front | n/a |
|  | [0] | 1 _ front | n/a |

We can see that there is a process of dissimilation in operation in syllable with either the palatal stop or the voiceless bilabial stop. With the bilabial stop we can see that rounding is realised on the stop only when it is not present in the syllable rime, and with the palatal stop we observe that the more back allophones of the stop are realised only when the rime contains less back vowels. Examples of these processes are shown in the following pairs of allophonic minimal pairs.

Table 21. Allophones of $\uparrow \mathbf{\uparrow} /$ and $/ \uparrow /$

| Onset |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rime | ¢/ |  | ¢¢/ |  |  |  |
| i | [ $\mathrm{P}^{\text {wr }}$ ] | [ $\mathrm{p}^{\mathrm{w}} \mathrm{F}_{\text {] }}$ ] | 'mountain' | [9]] |  | 'break' |
| $\varepsilon$ | [ $\mathrm{P}^{\text {wi }}$ ] $]$ | [ $\mathrm{P}^{\text {w }}$ \% $]$ | 'smoked' | [9] ${ }^{\text {a }}$ ] | [qu] | 'place' |
| a | [ $\mathrm{P}^{\text {w/ }}$ ] $]$ | [ $\mathrm{P}^{\text {Waba] }}$ | 'water' | [ $]$ | [1®] | 'sea' |
| $\square$ | [ p ] | [p\%] | 'edge' |  |  |  |
| u | [ p ] | [piii] | 'bamboo' |  |  |  |
| 4 |  |  |  |  |  |  |
| $\square$ |  | [pel] | 'tongue' |  |  |  |

 the vowels that may follow $\not \subset /$ (see 2.4.3), accounting for some of the gaps in table 21 above. Note further that both $/\lceil/$ and $/ j /$ share a feature of tongue backing: most allophones of these consonants involve either a back articulation, or movement to a more back articulation from a less back place (in [fil], for instance, the tongue moves from an alveo-palatal setting to a full palatal setting). This is important for the discussion in 2.4.1.

### 2.2.1.9 /k/

The high back consonant is more strongly, and more frequently aspirated than the other stops. The only allophony that has been noted involves intervocalic lenition, in which a $\mathbb{K} /$ in a clitic is sometimes realised as $[\mathrm{Y}]$ or $[\mathrm{h}]$.

In addition to this allophony we can also find morpholexical variation between k and $\emptyset$. This is found in the 1 SG subject prefix (see 7.2.2), and in some lexical items, such as $k u$ 'child', which is sometimes heard as $u$ (such as in the fixed expression tata u-ké 'Jesus', literally 'God's child', which is never heard as tata ku-ké). Further, kung 'drink' is sometimes heard as hung, though this might be contemporary sociolinguistic influence from the languages around Vanimo.

### 2.2.1.10 /h/

The $/ t /$ phoneme is a relatively unexceptional voiceless segment, the only unusual aspect of which is its tendency to disappear between two adjacent vowels. A common example of this can be seen in líhi 'garden', which is often realised simply as [i¢ $(\underset{y}{\prime})$, though in careful, elicited speech [liki] is always produced. When this happens it appears that the whole second syllable, which has the $/ \mathrm{h} /$ onset, is omitted, as the tonal information associated with that syllable, as well as the $[\mathrm{h}]$, is not realised. The optional vowel lengthening found with this allophone is the only trace that is found of the elided syllable.

### 2.2.2 Consonantal analysis

The previous sections described the phonetic differences between the consonants and the environments in which they are found, and in this section I shall propose a phonological account of those patterns.

### 2.2.2.1 Consonantal analysis

The contrasts that we have seen for the consonants of Skou can be described with the features seen in table 22. This table presents the full specifications for all features on each distinctive consonant. Of course a greater range of features might also have been employed, but the set of eight used here suffices to differentiate all the consonants, and also reflects what appears to be the relative markedness relationships between the consonants in the language. The phoneme $\mathrm{m}_{\mathrm{p}} /$, for instance, is assigned the smallest number of features of all the consonants, reflecting both the fact that it is the one phoneme with zero allophones (see 2.2.1.1) and the fact that it is the most consonant phoneme with the highest frequency.

Table 22. Contrastive features of the consonants

|  | p | t | k | b | j | f | h | W | y | r | 1 | m | n |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| high | - | - | + | - | + | - | - | - | + | - | - | - | - |
| back | - | - | $+$ | - | - | - | $+$ | - | - | - | - | - | - |
| coronal | - | + | - | - | - | - | - | - | - | + | + | - | + |
| continuant | - | - | - | - | - | + | + | $+$ | $+$ | + | + | $+$ | + |
| sonorant | - | - | - | - | - | - | - | $+$ | + | + | + | $+$ | $+$ |
| nasal | - | - | - | - | - | - | - | - | - | - | - | $+$ | + |
| lateral | - | - | - | - | - | - | - | - | - | - | $+$ | - | - |
| voice | - | - | - | $+$ | + | - | - | + | + | + | + | + | + |

Not all of these features used in table 22 bear the a comparable functional load. Voicing, for instance, is used only to allow the contrast between the two bilabial stops, $/ \mathbf{p} /$ and $/ \mathrm{t} /$. For that pair it is the sole distinguishing feature, and so clearly necessary, but everywhere else the voicing value for a segment can be predicted from other features specifying manner and place. Similarly it is redundant to specify a vowel as both [- low] and [+ high] (see 2.2.3.1), where the single specification [+ high] can be taken to subsume the specification [- low], and vice versa (Archangeli 1988, Steriade 1995, etc.). We can make the following assumptions about markedness hierarchies, based on observed cross-linguistic tendencies:
place: consonants are unmarkedly non-back;
high (stop) consonants are unmarkedly back;
manner: non-coronal sonorants are unmarkedly nasal;
consonants are non-sonorant;
voicing: non-sonorants are unmarkedly voiceless;
sonorants are unmarkedly voiced.
In addition to these universalist conditions there are some markedness rankings that apply to Skou, adduced on the basis of the behaviour of the phonemes in the language:

Skou: consonants are unmarkedly non-continuants; coronal sonorants are unmarkedly lateral.
Applying these principles we can stated that, unless expressly marked for [+ voice], a nonsonorant will be voiceless, and a sonorant will be voiced. Similarly, in Skou the basic continuant is, unless expressly marked to the contrary, a sonorant (and thus unmarkedly voiced). Taking these hierarchies into account to redraw of the feature system to reflect these
markedness relationships is shown in table 23, in which the symbol $u$ stands for 'unmarked value (given the other features assigned)'.

Table 23. A markedness analysis of the Skou consonants

|  | p | t | k | b | j | f | h | W | y | r | 1 | m | n |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| high | $u$ | $u$ | + | $u$ | + | $u$ | $u$ | $u$ | + | $u$ | $u$ | $u$ | $u$ |
| back | $u$ | $u$ | $u$ | $u$ | - | $u$ | + | $u$ | $u$ | u | $u$ | $u$ | $u$ |
| coronal | - | + | $u$ | $u$ | $u$ | $u$ | $u$ | $u$ | $u$ | + | + | $u$ | + |
| continuant | $u$ | $u$ | $u$ | $u$ | $u$ | + | + | + | $+$ | + | + | $+$ | + |
| sonorant | $u$ | $u$ | $u$ | $u$ | $u$ | $u$ | $u$ | + | + | + | + | $+$ | + |
| nasal | $u$ | $u$ | $u$ | $u$ | $u$ | $u$ | $u$ | $u$ | $u$ | $u$ | $u$ | $u$ | + |
| lateral | $u$ | $u$ | $u$ | $u$ | $u$ | $u$ | $u$ | $u$ | $u$ | - | $u$ | $u$ | $u$ |
| voiced | $u$ | $u$ | $u$ | + | + | $u$ | $u$ | $u$ | $u$ | $u$ | $u$ | $u$ | $u$ |

Reading table 23 we can see that the only features that are actually specified for, for instance, $h_{\mathrm{h}} /$ are the values [+back] and [+continuant]. All the other phonetic features follow from the principles outlined above: nasality is unmarkedly negative, and consonants are nonsonorant. Voicelessness is the norm, and so it too is unspecified. Similarly, /b/ is marked only for the features [-continuant] and [+voice], since all of the other values follow from the defaults or are non-contrastive. Non-backness is the norm, as is non-sonorance.

Correlating this system with the observed frequencies of consonants in Skou we find that the most commonly occurring consonants are the ones with the least amount of featural specification. Compare the amount of specification in the table above with the following chart showing the relative frequencies of the different consonants of Skou.

Table 24. Frequencies of the Skou consonants

|  | p | t | 1 | n | h | k | r | f | b | m | w | y | j |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Frequency (\%age) | 14 | 14 | 14 | 9 | 9 | 8 | 8 | 7 | 6 | 5 | 3 | 3 | 1 |

All consonants are specified as either plus or minus coronal. The least specified consonants are p and t , implying that specifying coronal is 'worth less' in terms of markedness than the other features. The next two most frequent consonants are also coronal, but sonorant. The most infrequent consonants are those that are sonorant but non-coronal, or else non-sonorant but voiced. The relative frequencies of the consonants in table 24 reflects the number of features that are required to specify those consonants.

### 2.2.2.2 An alternative arrangement of the consonants

The discussion above both describes and analyses the consonantal system of Skou. The presentation has held closely to the phonetic distinctions present in the consonants, and has not imposed too much in the way of analytical machinery on to it. Some aspects of the distribution of the phonemes, and their allophones, suggests that an alternative view is possible.

The only completely clear voiced:voiceless contrast in the same place of articulation in Skou is pit; the dental, palatal and velar places lack this contrast, either phonetically or phonologically. Nevertheless, the fact that $/ \mathbb{w} /$ has the allophone [ 0 ] in some environments (see 2.2.1.4), and that there are two non-nasal sonorants in the alveolar place, a unique feature
amongst languages in the Skou family and unusual in New Guinea generally, could lead to the following rearrangement of some of the phonemes:

Table 25. The consonants of Skou II

|  | Labial | Alveolar | Palatal | Back |
| :--- | :---: | :---: | :---: | :---: |
| Voiceless | p | t |  | k |
| Voiced | b | r | I | $(\mathrm{g}) \mathrm{W}$ |
| Continuant | f | l | j | h |
| Nasal | m | n |  |  |

The advantages of this arrangement are plain to see: the system is much more symmetrical, and the gaps in the inventory are not so typologically unusual. All the major places of articulation show a voicing contrast in the non-continuants, and all have a continuant. The fact that a $/ \mathrm{r} /$ is sometimes realised as [i] following a nasalised vowel (eg., fèng=ra 'just bad' /fera/ appearing as [fende]) also suggests that this might be a valid analysis. While tempting, this analysis ignores the fact that historically the $/ \kappa /$ is derived from * t , and that the voiced alveolar stop $* \mathbb{d}$ has developed into the $/ \mathrm{t} /$. While the arrangement does show a 'neater' picture of Skou consonants, it does not explain the borrowing of words with [ 3 ] into Skou with a [ r$]$, whereas the historical scenario, in which $*_{s}>*^{*} \boldsymbol{>} / \mathrm{I} /$ offers a perfect explanation (see Donohue 2002b for a fuller explication of historical changes in the phonologies of the Skou family languages).

Another organisational option would be to assign the $\mathscr{F}^{\boldsymbol{T}} /$ to the voiced back position (recall that it does show the allophone [ $\mathrm{g}^{\mathrm{j}}$ ], a clearly back sound), and perhaps separating f and $\mathrm{h}_{\mathrm{h}}$ from $\mathbf{l}$ and $\mathfrak{j}$, thus allowing 'space' for $\mathbb{w}$ as a continuant, but otherwise following the arrangement above. The fact that at least one loan word, kurù 'teacher', is known in which a $g$ in the source language (the roots of the word are Indonesian/Malay guru) is transferred into Skou as a voiceless velar stop $k$, rather than the voiced palatal $\downarrow$, suggests that this option is not without problems of its own, and so has not been pursued in detail here. ${ }^{19}$

### 2.2.3 Vowels

The vowel system of Skou consists of seven contrastive vowels, including four rounded and three unrounded ones, and containing the presence of high and mid front rounded vowels, something that is generally typologically unusual and particularly unusual in the New Guinea context. The number and nature of vowel contrasts varies depending on the suprasegmental environment in which the vowels appear. Ignoring constraints imposed by the choice of onset, if present (see 2.4.3), we find the following contrasts in different tonal environments.

Firstly, there are seven phonetic contrasts in syllables with a high pitch, arranged as follows.

[^12]Table 26. Vowel qualities encountered in high or falling pitch syllables


Examples: [fi] 'louse', [fe] 'tomorrow', [fy] 'spittle', [f\#] 'afraid', [fa] 'sleepy', [fiw] 'blind', [fo] 'corner house post'.
In syllables which have a falling pitch or a low pitch there is still a seven-way contrast, but it is composed of different phonetic vowels. The contrasts found in these environments are in most cases made by different vowels to those seen in high pitched syllables.

Table 27. Vowel qualities encountered in syllables with low and falling pitch


Examples (falling pitch unless stated): [I] 'no!', $[\varepsilon]$ 'cooked', [ [] 'ripe (fruit)', [ mr ] 'marry' (low pitch), $[\mathrm{a}]$ 'rope', $[\mathrm{s}]$ 'rotten', $[\square]$ 'go seawards (low pitch)'.
It is clear that only seven distinctions are operating here, but with both somewhat overlapping allophones; this is preferable to positing the existence of twelve phonetically different vowel contrasts. Alternations in pitch on words when they precede high or falling tones show the alternations.

When we extend the data set to include nasalised vowels, yet more phonetic vowel qualities are found, though the total number of contrasts in each set is reduced. In all cases there is no highish- centralish- rounded vowel in a nasalised environment. When the syllable is nasalised and has high or falling pitch, the vowel qualities are lower than would be expected for vowels in a non-nasalised syllable.

Table 28. Vowel qualities encountered in high and falling pitched nasalised syllables


When the pitch of a syllable is low, then the vowel qualities are even lower, as seen in table 29.

Table 29. Vowel qualities encountered in low pitched nasalised syllables


The total range of phonetic vowel qualities found is shown in figure 4 , which contains sixteen different vowel types.

Figure 4. Phonetic vowel qualities found in Skou

| 1 | $Y$ | \# | 1. |
| :---: | :---: | :---: | :---: |
| I | $\square$ | \# ${ }^{\text {r }}$ | $\square$ |
| E | e |  | 0 |
| $\varepsilon$ | 0 |  | -1 |
| ET |  |  | $\square$ |
|  |  | E |  |

Again, we would not want to posit sixteen underlying vowel contrasts, since no tonal or nasalisation environment allows all these vowel qualities contrastively. On the basis of the data above, we can assume the following underlying set of vowel contrasts in Skou, with four degrees of phonetic height, and at least five phonetic positions on the front-back axis, which are described phonemically in 2.2.2.1 in terms of a simply binary opposition in each direction.

Table 30. The underlying vowels of Skou

|  | front $\longleftrightarrow$ back |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| high | i |  | 4 | 1 |
| , | D |  |  |  |
| $\downarrow$ | $\varepsilon$ |  |  | 3 |
| low | a |  |  |  |

These vowels show allophones in different suprasegmental environments according to the forms shown in the preceding tables (tables $26-29$ ). For instance, the variation in the back vowels can be summarised in (3).

$$
\begin{array}{lll}
\text { /o/ } & \rightarrow[\square] / \text { low pitch } & (\rightarrow[u] \text { elsewhere })  \tag{3}\\
/ \mathrm{L} / & \rightarrow[\square] / \text { high pitch } & (\rightarrow[\square] \text { elsewhere })
\end{array}
$$

(a similar analysis can be developed for the front vowels and the non-back rounded vowels)

It could be argued that the fact that the same phonetic quality (in this example, [ $[0]$ ) is being assigned to different phonemes based on the pitch environment is an unnatural stipulation. That is, an alternative analysis would assign the identical $[\square]$ vowels to the one phoneme, and the alternation between $[\square]$ and $[u]$ would be assigned to another phoneme, as in (4).

$$
\begin{array}{ll}
/ \mathrm{g} / \mathrm{l} & \rightarrow[\square] / \text { low pitch } \quad(\rightarrow[u] \text { elsewhere })  \tag{4}\\
/ \square / & \rightarrow[0] / \text { everywhere }
\end{array}
$$

The advantage of this solution would be that the language learner need only acquire one rule of allophony, the rule that accounts for the variation between the extremes, while one of the vowels remains constant. The practical differences between the analysis in (4), with one varying vowel and one unchanging vowel, and the one proposed in (3) can be seen in the data set in table 31:

Table 31. Two analysis of vowel contrasts

|  | Phonetic forms |  | Analy <br> (3) | (4) |
| :---: | :---: | :---: | :---: | :---: |
| [k] | [\|-] | 'east' | ke/ | Aku/ |
| [ko] | [\|-] | 'child' | /ku/ | Ako/ |
| [ko] | [ ${ }^{-}$] | 'kind of armband' | ka/ | Ako/ |
| [ku] | $\left[{ }^{-}\right]$ | 'dew' | Aku/ | 180/ |

We can show that the alternations which have been shown here as allophonic, summarised in analysis (3), are in fact dynamic allophones of the same vowels. This can be demonstrated by examining the allophones of the vowel $\varepsilon /$ when the syllable in which it is appeared changes pitch. For instance, the genitive pronouns (see 6.3.1) are derived from the basic pronouns by changing the pitch to a falling one (or in one instance high - see 2.4.1 for discussion), regardless of what the lexical pitch for that pronoun is. When this happens, the allophone of $\varepsilon /$, the vowel of most pronouns, is raised:

Table 32. Allophony of $\varepsilon$ /

|  |  | basic pronoun; low pitch | Environment: genitive pronoun; high or falling pitch |
| :---: | :---: | :---: | :---: |
| pe/ | 3SG.F | [pe] [\|-] | [pe] [/\] |
| tel | 3PL | [ t ] [ [-] | [te] [/\] |
| Ase/ | 3SG.NF | [ke] [\|-] | [ke] [\|-] |

The only difference between the basic and the genitive pronouns shown here is the pitch, and there is a clear relationship between the two. This is suggestive that the differences in vowel quality do reflect actual allophony, and that the analysis in (3) is to be preferred over that in (4). Furthermore, speaker preferences for orthographic representation are also supporting evidence for the analysis here (with the orthographic forms ko 'east', ku 'child', kó or ko 'armband' and kú or ku 'dew'

The allophones that have been reported for vowels in different pitch environments in the various tables of this section are summarised in table 33 .

Table 33. Vowel allophones in Skou conditioned by pitch or nasalisation (summary)

|  | Non-nasalised |  | Nasalised |  |
| :---: | :---: | :---: | :---: | :---: |
|  | High pitch | other | High pitch | other |
| i/ | i | I | I | E |
| $\varepsilon /$ | e | $\varepsilon$ | $\varepsilon$ | $\bar{r}$ |
| 苗/ | a | a | a | a |
| b/ | $\square$ | 9 | 0 | $a$ |
| ha/ | u, u | v, 0 | $\square$ | -r |
| m/ | \# | \% | - | - |
| 隹/ | Y | 0 | e | 0 |

There is no low front [ $\ddot{\ddot{ } \text { ] phone in Skou. While this is not surprising cross-linguistically, it is }}$ striking compared to the other languages closely related to Skou (see 1.2), all of which show this phone, as a nasalised allophone of $\varepsilon /$ (which contrasts with $/ e /$ ). The lack of this sound in

Skou is something that visitors from Papua New Guinea remark upon as a salient quality of Skou.

The list of allophones in table 33 does not exhaust the range of allophonic possibilities for vowels in Skou, as the form of the vowel in a preceding syllable of the same phrase also has an effect. This shall be described in the following section, 2.2.3.1. Additionally, there is also a non-syllabic allophone of the vowel /i/. This vowel is realised as a nasal in one environment; while there is only one morphophonological environment for this unusual allophone, it does occur extremely frequently because of the frequent use of the morpheme that shows this variant. The clitic cluster used to express definiteness, $=/ \mathbf{i}$ a/, which is here orthographicallyrepresented as =ing $a$ 'the' following slow speech pronunciation and speaker preferences for orthography, is low-toned and as a clitic sequence always occurs in an unstressed position in whatever word it forms a foot with. As such, it is not surprising that it is often pronounced as a single syllable, with the high vowel pronounced as a glide that preserves the nasalisation of the original vowel, resulting in the form [je]. A further development of this desyllabification is for the nasalised palatal glide to be realised, unsurprisingly, as a palatal nasal, thus [ia]. This has been observed to be particularly common after a/v/ vowel, and less common after a nasalised vowel. Some examples of these allophones are shown in (5) - (7). The presence of phonemic nasalisation on the last vowel of the noun in (7) decreases the likelihood of the [ $\bar{j}]$ allophone appearing.

```
[pGinku ĩa] ~ [nsimpuia] ~
[r:4inkupa]
```

prabuica $\quad$ 'the girl' $\{p e=$ angku ing $a\}$
(6) hainel 'the bag' \{ha ing $a\}$ [he 1a.] ~ [he "je] ~ [he pa.]
hã inal 'the coconut' \{ha ing a\} [he le] ~ [he je]~ $\pm$ / [hal jas]

Only three monomorphemic words are known with to have the syllable / $\sigma$ ì $\sigma /$ (that is, a nasalised high front vowel with no consonant in the onset position. Of these three two have either a word break or a consonant following the $\check{I} /$. The remaining word has a tone pattern which does not require a prominent (high or falling) pitch to be associated with that syllable, and the syllable following the $/ \mathrm{i} /$ is another onsetless syllable, making for another $\AA^{\circ} \mathrm{V} /$ environment. In this word we also find the palatal nasal allophone in variation with nasalised vowel or nasalised glide allophones.

| $\stackrel{1}{1}$ |
| :---: |
|  |  |

(9) $n \mathrm{ailibe}$ 'money’ \{taíngbe\}
[teïbe] ~ [timbe]
(10)

| FeS/ | 'cat' | \{ingéong\} |
| :---: | :---: | :---: |
|  |  |  |
| [1е\%] |  |  |

In all cases described here the spread of nasality is optional, and never compulsory. The version of taíngbe with no prenasalisation shown in (9) is quite common, and completely natural.

## 2．2．3．1 Further vowel allophony

In the previous section we saw data showing that the pitch of the syllable affects the quality of the vowel，as does the presence of nasalisation on the syllable rime．In addition to this，the quality of vowels in neighbouring syllables，particularly preceding syllables，affects the quality of the vowel（though there is no observed correlation between position in a word and vowel quality）．The following table lists some common examples of vowel allophony influenced by the quality of the vowel in the preceding syllable，when there is an intervening consonant．For instance，the vowel［e］is heard in the second syllable when any of the sequences（C）iCe， $(\mathrm{C}) \sharp \mathrm{C} \varepsilon$ ，or $[(\mathrm{C}) \mathrm{r} \mathrm{C} \varepsilon](</(\mathrm{C}) \llbracket \mathrm{C} \varepsilon /)$ are present，and $[\varepsilon]$ is heard for $\varepsilon /$ when the preceding vowel is anything else．

Table 34．Vowel allophony and preceding vowels in $\mathrm{V}_{\mathrm{b}} \mathrm{CV}_{\mathrm{a}}$ template

| $\mathrm{V}_{\mathrm{a}}$ ： | Vowel in preceding syllable（ $\mathrm{V}_{\mathrm{b}}$ ） |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | i | $\mathrm{I}, \mathrm{e}, \mathrm{E}$ | a | 0,0 | － | H，Y | 可， |
| i | i | i | i | i | i | i | I |
| $\varepsilon$ | E | $\varepsilon$ | $\varepsilon$ | $\varepsilon$ | $\varepsilon$ | E | $\varepsilon$ |
| 8 | 旱 | a | a | П7 | 8 | a | a |
| $\square$ | Er | ET | 0 | 0 | $\square$ | $\square$ | 9 |
| 1 | \＃ | H | 0 | $\square$ | 0 | $\square$ | サ |
| 4 | Y | E | 4 | 1 | $\downarrow$ | 4 | 4 |
| 0 | （1） | $\square$ | 0 | 0 | 0 | 0 | 0 |

In addition to the allophony shown in table 34 xxx ，which is dependant on the nucleus in the preceding syllable，vowels can be substantially influenced by a following vowel if there is no intervening consonant（in contrast to the preceding－syllable allophony，which applies even if there is an intervening consonant）．The following－vowel allophony mainly involves assimilation in terms of rounding，and dissimilation in terms of height，and to a lesser extent degree of backness．

Table 35．Vowel allophony and preceding vowels in $\mathrm{V}_{\mathrm{b}} \mathrm{V}_{\mathrm{a}}$ template

| $\mathrm{V}_{\mathrm{a}}$ ： | Vowel in preceding syllable（ $\mathrm{V}_{\mathrm{b}}$ ） |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | i | $\varepsilon$ | a | $\bigcirc$ | u． | $\#$ | $\square$ |
| i | e | i | i | i | i | （i） | Y，区 |
| $\varepsilon$ | $\varepsilon$ | E | $\varepsilon$ | $\varepsilon$ | $\varepsilon$ | $\square$ | 厚 |
| a | a | a | a | a | a | a | a |
| a | A | A | a | $\square$ | $\square$ | $\square$ | $\square$ |
| u | ur | ur | 0 | $\because$ | 1 | $\checkmark$ | \＃ |
| \＃ | y | Y | H | \＃ | \＃ | E | $\#$ |
| a | I | $\square$ | a | ■ | $\square$ | E | 0 |

Combining the allophones in the preceding two tables with the pitch－and nasalisation－ induced allophonic variants described in the preceding section we can easily see that many of the environments are compatible．The allophones listed in the above tables should thus be taken not as providing an absolute prediction of the realisation of a vowel，but a list of the most common variants that will be encountered．For instance，in the phrase＇the burp＇，oe＝inga，we find two competing environments that could determine the quality of the $/ \mathrm{i} / \mathrm{vowel}$ ，the preceding
/ $\mathbb{G} /$ and the nasalisation. The first of these would suggest a [ Y$]$ or [匹] vowel, and the second a [e] vowel. In fact the vowel can be realised as any of these: the phrase may be heard as [cepa], or equally [ate], and several other variants besides. A full list of the qualities associated with each phoneme, assembled from the tables preceding in this and the previous section, is given in figure 5, which shows the different vowel qualities and is divided by lines indicating the regions of allophony of each phoneme.

Figure 5. Vowel spaces and overlap of allophones


This same data is summarised in table 36 , showing more clearly the points at which the allophones of different phonemes overlap. In this table not all phonetically distinct forms have been assigned to a separate column, but rather some compromises have been made. The table shows the allophones from high front running through the low allophones to the high back, and then mid- and front unrounded qualities.

Table 36. Vowel allophones (complete)

| - Possible allophones - |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a0$u$$\#$0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Y |  | $\square$ |  |  |
|  |  |  |  |  | $\varepsilon$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 9 |  |
|  |  |  |  |  |  |  |  | a | 7 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  | - | , | A | 0 | 7 | 0 |  |  |  |  |  |  |  |  | ET |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | - | 0 | u | 0 |  | 1 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\downarrow$ | \# ${ }^{\text {\% }}$ | Y | y | - |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Y |  |  |  |  |

Another point of note, immediately obvious from figure 5 and table 36, is that many of the vowel phonemes show allophones that are identical or near-identical to the allophones found for other vowel phonemes, but appearing in different environments. More relevantly, many of the allophones of some vowels overlap with the allophones of other vowels in tonal environments. This creates some difficulty for an outsider hearing the language for the first time, and is probably responsible for Voorhoeve's (1971) analysis of the language as having nine vowels (which was also this author's first impression).

The phonetic data can be modelled phonologically without recourse to extreme specification, and accounting for the allophones of the underlying vowels is easily accomplished by using the following set of features to describe and separates these vowels.

Table 37. Features of vowels in Skou

|  | i | $\varepsilon$ | a | 0 | 1. | H | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| high | + | - | - | - | + | + | - |
| back | - | - | - | + | + | - | - |
| front | + | $+$ | - | - | - | - | $+$ |
| round | - | - | - | + | + | + | + |
| (low | - | - | + | - | - | - | -) |

The feature [low] has been included in the table not because it is necessary to distinguish any vowels in Skou, but because it is a reminder of the uniquely low status of $m /$, which has several behavioural peculiarities and is best referred to without reference to disjunctive sets. As with the consonants, we can redraw this table in terms of marked and unmarked categories. The following principles are applied, none of them specific to Skou.
frontness vowels are unmarkedly non-back; non-back vowels are unmarkedly front;
height non-back, non-high vowels are unmarkedly low
rounding back vowels are unmarkedly rounded;
non-back vowels are unmarkedly unrounded
This results, along with the removal of the redundant feature [low], with only seven 'plus' values in the chart, which is shown below.

Table 38. A markedness analysis of the Skou vowels

|  | i | $\varepsilon$ | a | 1 | 1. | \# | $\square$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| high | + | - | $u$ | - | + | + | - |
| back | $u$ | $u$ | $u$ | + | + | $u$ | $u$ |
| front | $u$ | $u$ | u | $u$ | $u$ | - | $u$ |
| round | $u$ | $u$ | u | $u$ | u | + | + |

Again we can examine these features in terms of the predictions that they would make about the relative frequencies of vowels in the lexicon. Again, as with the consonants, these frequencies match up well with the amount of feature specification we have posited.

Table 39. Frequencies of the Skou vowels

|  | a | i | $\square$ | $\varepsilon$ | u. | a | \# |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Frequency (\%age) | 29 | 24 | 16 | 13 | 7 | 7 | 3 |

Here too we can see that the features we have used to specify the vowels correspond to the frequencies with which the vowels are represented. The vowel a is overwhelmingly common, and is the least specified vowel. i is specified only for [+high], and is second in frequency. A
significant drop later a and $\varepsilon$ appear, followed by the back vowels and finally the highly specified high mid rounded vowel $\psi$.

This feature system establishes the following set of natural classes:
Figure 6. Simple natural classes


There are some other classes of vowels, which are useful to recognise because of their common behaviour in various phonological processes. They are defined by a combination of features and relationships between features, described in table 40.

Table 40. Classes of vowels

| Class | Defining features | Includes | Referred to by: |
| :---: | :---: | :---: | :---: |
| non-front round | + round, -front | \#》 | marking feminine |
| front or low | $\alpha$ front, $-\alpha$ low | ic®a | co-occurrence with voiced stops |
| front unrounded | + front, -round | i e | marking plural |
| non-back, rounded | - back, + round | 团 | non-occurrence with [j] |

The phonological shape that the morphological marking of feminine and plural takes is dealt with in the following section; the morphosyntactic effects and consequences are described in 7.2.3, 7.3.4 and 7.3.5. Section 2.4 documents the co-occurrence restrictions that pertain between consonants of different types and vowels.

### 2.2.3.2 Changes in vowels for number or gender of argument

The following rule describes the changes observed in the vowels of a number of verbs when feminine is marked:

$$
\left[\begin{array}{l}
\alpha \text { front }  \tag{11}\\
\beta \text { back }
\end{array}\right] \quad \rightarrow \quad\left[\begin{array}{l}
- \text { front } \\
-\alpha \text { back } \\
-\beta \text { high }
\end{array}\right]
$$

This rule backs and rounds vowels when the feature [feminine] is marked on a predicate. The following vowels are regularly affected:

(the consonant changes are regular and semi-regular alternations found with most verbs; see 7.2.2)

The operation of this rule is discussed in more detail in 8.2.3. When the feature [plural] is marked on the verb, the vowels change in a different pattern, as described in the following rule:
(12) $[\alpha$ back $] \quad \rightarrow\left[\begin{array}{l}+ \text { front } \\ (- \text { back }) \\ (- \text { round }) \\ -\alpha \text { high }\end{array}\right]$

This rule serves to front and raise a vowel; it models the following alternations:

$$
\begin{array}{llll}
\text { (13) } & \rightarrow \mathrm{i} & \text { ly 'hear' } & \text { ni 'they hear' } \\
\emptyset & \rightarrow \mathrm{i} & \text { lo 'shave' } & \text { ni 'they shave' } \\
\varepsilon & \rightarrow \mathrm{i} & \mathrm{ke} \text { 'get' } & \text { ki 'they get' } \\
\mathrm{u} & \rightarrow \varepsilon & \text { fux 'fear', } & \text { fe 'they fear' } \\
\sigma \rightarrow \varepsilon & \mathrm{ko} \text { 'hide' } & \mathrm{k} \varepsilon \text { 'they hide' }
\end{array}
$$

This rule is also discussed in more detail in 7.2.3, and data on the irregular forms that are partly covered by this rule can be found in appendix 2 .

### 2.2.3.3 Vowels and syllabification

We have mentioned that the shape of the syllable in Skou does not allow for a coda position. This means that any sequences of vowels must necessarily involve a sequence of two syllables; in no cases are two adjacent vowels interpreted as belonging to the same syllable. This can be demonstrated by the ability of the two vowels to appear with different pitch contours, and more importantly with different specified values for nasality (though through the process of nasal spreading (2.3.2) the second vowel in a sequence of two vowels will be somewhat nasalised phonetically, even if not specified for nasalisation phonologically). For instance, in the word [fıii] 'tomorrow', the two vocalic segments will never be realised as $*[f \in \mathbb{W}]$ or $*[f \in \mathbb{w}]$; the nasalisation is a property of the rime of the second syllable, and can only spread rightward.

### 2.2.4 Segmental phonology: a summary

The following table summarises the segmental phonemes, with their major allophonic variants shown in square brackets following. The arrangement is not ideal, since it cannot represent all the natural classes that can be identified.

Table 41. Segmental phonemes and their allophones

| Place: Feature: | Bilabial Bilabial | Labio-dental | Alveolar Front | Palatal <br> $\longleftarrow$ High $\qquad$ |  | Glottal |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Voiceless stop | $\mathrm{P}\left[\mathrm{P}^{\text {Wr }}\right.$ ] |  | $\mathrm{t}\left(\left[\mathrm{t}^{\mathrm{w}} \sim \mathrm{s}\right]\right)$ |  | $\mathrm{k}\left[\mathrm{Y} \sim \mathrm{h}^{\prime}\right]$ |  |
| Voiced stop | b |  |  | $\mathrm{f} \sim\left[\mathrm{g}^{\mathrm{j}} \sim \mathrm{p}\right]$ |  |  |
| Fricative |  | f |  |  |  | h |
| Lateral |  |  | 1 |  |  |  |
| Rhotic |  |  | r |  |  |  |
| Nasal | $m$ |  | n |  |  |  |
| Glide |  |  |  | j [ $\left.\mathrm{m}_{\text {j }} \sim \mathrm{dzj}\right]$ | W [ ${ }^{\text {w }}$ ] $]$ |  |
| High |  |  | i [e] | \# [ $\mathrm{E} \sim \mathrm{Y}]$ | u. [ $\mathrm{O} \sim \mathrm{mex}]$ |  |
|  |  |  | $\varepsilon$ [ e$]$ | © [0] | $\bigcirc$ [o] |  |
| Low |  |  |  | a |  |  |

The most obvious lack in this table is the organisation of the phonologically rounded segments $\uparrow \mathbf{T} / \mathrm{and} / \mathrm{w} /$, which are not grouped coherently. The vowels, too, ideally require some further differentiation, as detailed in 2.2.3.2.

### 2.3 Suprasegmental phonology

In addition to the vowel and consonant segments, Skou also displays suprasegmental contrasts in both pitch and nasalisation. Three different pitches contrast on monosyllables, and, although there are regularly three degrees of phonetic nasalisation, only two phonologically contrastive levels, nasalised and oral. These contrasts are illustrated in the six-way contrasting set shown in table 42, which all use the segments [ta].

Table 42. Tonality and nasality contrasting on monosyllables

| Pitch |  | Nasalisation |  |
| :---: | :---: | :---: | :---: |
|  |  | oral | nasal |
| low | [\|-] | ta | tig. |
| high | $\left[\left.\right\|^{-}\right]$ | 'hair' | 'canoe' tian |
|  |  | 'grass' | 'bird' |
| falling | [ 1 ] | ta | tiz |
|  |  | 'arrow' | 'machete' |

A more detailed description of the realisation of these suprasegmental features is given in the following sections, first describing the tonal melodies and tone sandhi processes, and then the realisation of nasalisation and the differences between phonological and phonetic nasalisation.

### 2.3.1 Tone

Tone plays a high functional load in Skou, serving both lexical and grammatical functions. An example of a tonal minimal pair in a environment where context does not serve to disambiguate the meaning can be seen in the following pair of sentences, in which the pitch of the monosyllabic verb stem (shown above the verb in Chao tone letters (Chao 1920), a high pitch and a falling pitch, respectively) is the only possible means of disambiguating the words and the clauses. In the following minimally-contrastive sentences, the pitch of the syllable of the verb root is shown to indicate the nature of the pitch contrast; the rest of the sentence is (approximately) the same. ${ }^{20}$
(14) Hòe pe=há e tue.
sago 3SG.F=pound 3SG.F.be 3SG.F.do
'She is pounding sago (to make flour).'

| $\left[\begin{array}{lll}42 & 21=\mathbf{4 2} & 21 \\ \text { Hòe } & p e=h a ̀ & e \\ \text { sago } & \text { 3SG.F=weave } & \text { 3SG.F.be }\end{array}\right.$ | tue. |
| :--- | :--- | :--- | :--- |
| 3SG.F.do |  |

'She is weaving sago (into thatch).'
Skou contrasts three different pitch contours on monosyllabic words: high, a 44 pitch, low, a 22, and falling, 41 (plus conditioned variants; see the following section). These categories are recognised by Skou people, who describe the different pitch melodies, using Indonesian, as logat tarik (or logattinggi) 'pulled tone' (or high tone), logattengah 'middle tone' or 'average tone', and logattekan 'pressed/stressed tone', respectively. ${ }^{21}$ Tone is independently affiliated with each word, not to each syllable, as has previously been thought (Voorhoeve 1971, Donohue 1997) (see 2.6 for discussion). This section shall deal with the realisation of tone as pitch contours on syllables, and the contrasts thus presented, as well as the methodology of determining the phonological rules underlying the different pitch contours. As an aid to understanding the system quantitatively, fundamental frequency tracings of syllables representative of the different pitch envelopes described here are presented in appendix 4 (though see Rose 1988 for a caution against directly equating pitch, one of the perceptual correlates of linguistically significant tone, and fundamental frequency, an acoustic measure).

### 2.3.1.1 Tone Sandhi

Not all of the phonetic realisations of the one lexically-associated tone melody on a syllable are the same in Skou, implying that there might be some dynamic process or processes that result in an alternative to the underlying form of the specified pitch. Ross (1980) describes a process of tone sandhi in Vanimo (Dumo - see 1.4) which operates such that adjacent sequences of falling

20 An additional contrastive sentence, with pitch levels approximately [42 22 21], can be made from each of these two sentences by inflecting it for past tense; this involves suppleting the lexical pitch of the verb root with a low pitch (see 2.3.1.6), and not using the auxiliaries.
21 In addition to frequent, mutually bewildering, consultation with native speakers on the tone ('sound') of their language, my exposition has benefitted from correspondence with Larry Hyman. While he may not agree with everything said here, thanks to him it's easier to see the points of disagreement. Tida Syuntarô has provided valuable comments concerning various aspects of tone and analysis.
and then either falling or high are realised as a sequence of high pitches. The same phonetically natural process of tone sandhi can be observed in Skou; this may be informally represented as follows:

$$
\begin{equation*}
\mathrm{F} \rightarrow \mathrm{H} / \ldots \mathrm{H}, \mathrm{~F} \tag{16}
\end{equation*}
$$

This rule applies both word-internally and across words within the phrase. Examples of the application of this rule are given below, with the numbers in square brackets representing the pitch contour of the phrase, syllable by syllable (after Chao 1920), with 1 standing for the lowest pitch value and 5 the highest. The first set shows the pitches in forms closest to their lexically specified form, as they appear preceding a low tone on the prominence clitic $a$ (see chapter 4 for more discussion of these clitics). Even in this environment there is some change, with a grammatical word such as the clitic $a$ following a falling pitched-syllable optionally appearing with the fall spread over the two syllables.

| hua a [42 22] / [42 21] | paa[44 22] | fea. 22 22] |
| :--- | :--- | :--- |
| fall-low, | high-low | low-low |
| 'the sago' | 'the house' | 'the chopstick(s), |

If these same roots appear with a falling tone following them, realised here with the first person singular genitive suffix, the pitch contour is in some cases substantially altered:

```
Harin [44 41]
pani [44 41] fe ni [22 41]
    fall-fall
    'my sago'
    high-fall low-fall
    'my house' 'my chopstick(s)'
    HL+HL }->\textrm{H HL}\quad\textrm{H}+\textrm{HL}->\textrm{H HL}\quad\textrm{L}+\textrm{HL}->\textrm{L HL
```

This gives clear evidence for the existence of a productive tone sandhi rule as described above in (16), a rule that has a clear phonetic motivation: preceding a word that starts with a high pitch, the pitch of a syllable with a high component stays high. Further processes of tonal modification apply when a syllable appears phrase-finally, in which case the tone shows a slight falling off-glide (which can make the high and the falling pitches hard to distinguish), and phrase-initially, in which case there is often a slight up-glide. The different allotones are shown in table 43.

Table 43. Pitch contours associated with phonological tonal units on monosyllables

|  | $\ldots \mathrm{L}$ | $\ldots \mathrm{H}, \mathrm{F}$ | \#\#__ | $\ldots \# \#$ |
| :--- | :---: | :---: | :---: | :---: |
| High | 44 | $44,34,445$ | $33,3(4) 4$ | 43,42 |
| Low | 22 | 22 | 22 | 21,11 |
| Fall | 41 | 44 | 341 | 41 |

Further complications in tonal realisation are due to the fact that different dialects maintain the tonal contrasts with different tone melodies. The description above applies to the variety of Skou spoken in Skou Mabo. In Skou Yambe, however, the following melodies are prominent:

Table 44. Pitch contours in Skou Yambe

|  | $\ldots \mathrm{L}$ | $\ldots \mathrm{H}, \mathrm{F}$ |
| :--- | :---: | :---: |
| High | 45 | 44 |
| Low | 22 | 22 |
| Fall | 342 | 34 |

While the overall system is the same as the Skou Mabo one in terms of the contrasts that are maintained and their approximate location in tone space, there is considerable variance in the phonetic details, especially involving the equivalent of the falling pitch contour of Skou Mabo. This unit of contrast frequently shows a rise in Skou Yambe, which is not something attested in Skou Mabo outside question-induced rising intonation environments. Not enough material from Skou Sai has been heard and recordedto allow for a reasonable assessment of the pitch categories in that linguistic variety

We have seen examples of tonal contrasts on monosyllabic roots in 2.3. Pitch is associated with the syllable in Skou, and given that at least some roots are polysyllabic, we can also monitor the appearance of different tonal melodies on polysyllabic roots. This is taken up in the following sections.

### 2.3.1.2 Pitch contours on disyllabic roots

If the tonal system in Skou was syllable based, in which each syllable could be independently specified for tone, we would predict that there should be seven contrastive pitch patterns on disyllabic words. This assumption is based on the starting point of having three contrastive pitch contours attested on monosyllables, multiplied by three for the second syllable, and then reduced by two because there is no contrast predicted between the putative tone sequences HH and FH, or between HF and FF, due to the operation of the tone sandhi rule described in (16) above. These are in fact the attested tone patterns, as shown in table 45; the asterisks next to the sequences *FH and *FF indicate that they are not predicted, because of the application of the tone sandhi rule.

Table 45. Pitch contrasts on disyllabic roots

| Length | Pitch contour | Tonal melody | Example |  |
| :---: | :---: | :---: | :---: | :---: |
| 2-б | 3(4)4-43 | HH | 1 fi | 'black' |
|  | 43-21, 343-21 | HL | kity | 'green tree frog' |
|  | 44-41 | HF | fĭli | 'scorpion' |
|  | 22(3)-(3)44 | LH | nake | 'dog' |
|  | 22-21 | LL | pEro | 'lip' |
|  | 23-(3)41 | LF | pati | 'bamboo pig arrow' |
|  |  | *FH | - | n/a |
|  | 41-21, 42-11 | FL | 184 | 'ketapang fruit, peanuts' |
|  |  | *FF | - | $\mathrm{n} / \mathrm{a}$ |

Combining the information in tables 43, 44 and 45, and to some extent pre-announcing the results of trisyllabic tone patterns seen in 2.3.1.3 and 2.3.1.4, we can arrive at the following phonetic generalisations:

- all upper tones show an initial rise to a level at the beginning of an utterance; this is only occasionally found when the tone has a falling contour;
thus 33,344 and 34 are positional variants of 44 .
- all tones show some fall in pitch at the end of an utterance;
thus 43 and 42 are variants of 44 , and both 11 and 21 are variants of 22 .
- all tones accommodate the start or finish of a non-identical tone in an adjacent syllable;
thus 223 and 23 are variants of 22 preceding higher-pitched syllables; 43 and 33 are variants of 44 preceding lower-pitched syllables and 344 and 34 are variants of the high pitch following low pitched syllables. Similarly, the audibly convex pitch contour 341 is a predictable variant of 41 following a low-pitched syllable.
- tones dissimilate to some extent to avoid a series of identical pitches on adjacent syllables; this is especially true for high pitches (see (1) and its discussion in this section, and further on in sections 6 and 7).
thus all the sequences $34-43,34-44$ and 34-33 represent two identical highpitched syllables in a row, 44-44, with obligatory dissimilation.
Applying the principles that we can infer from observing these phonetic processes, and adding our knowledge of the pronunciation of words when in linked phrases or clause, we can 'tidy up' the raw phonetic data to derive the tone melodies shown in table 45. The simplest phonological account of these data from disyllabic roots involves one of two possible hypotheses about the lexical assignment of tone in Skou. Either:
- there are restrictions on the tone combinations that can appear on multisyllabic roots, with *FH and *FF being proscribed; the same proscription results in tone sandhi when two (or more) monosyllabic roots with tones specifying these pitches come together;

OR

- there are no restrictions on the tones that can be affiliated with each syllable in a multisyllabic root, but automatic tone sandhi processes neutralise absolutely the difference between the unattested $* \mathrm{FH}$ and the attested HH , and similarly with the unattested $* \mathrm{FF}$ and the attested HF.
Based on the data available we cannot decide which these two alternatives better accounts for the data. When we examine trisyllabic roots, however, we find that neither of these hypotheses completely adequately accounts for the facts of Skou tonology, and that a third hypothesis presents itself.


### 2.3.1.3 Pitch contours on trisyllabic roots

With trisyllabic roots there is a smaller corpus of words - most lexical items of three syllable length are transparently compounds, such as $\boldsymbol{M}$ 需 HHH 'dolphin', composed of the specifier
 cannot be determined, since it is not produced in isolation). Many examples of this sort of specifier-specific compounding can be found, and only a relatively small number of examples are given in table 46 . Here we can see that while this process of compounding with a general
specifier is particularly widespread with animal species names, it applies to both animate and inanimate nouns, though it does not appear so frequently with plant types. Chapter 10 and appendix 1 present further lexical information, showing the distribution of specifiers in different semantic domains.

Table 46. Specifier + specific trisyllabic lexemes

| Specifier |  |  | Specific type |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| mom | H | fish | mubi | HH | 'flying fish' |
|  |  |  | mulaba | HHH | 'whale' |
|  |  |  | mubi | HH | 'eel' |
|  |  |  | mbi | HH | 'turtle' |
|  |  |  | mpli | LF | 'stingray' |
|  |  |  | molit | HHH | 'dolphin' |
|  |  |  | muma | HL | 'shark' |
|  |  |  | आuпum | HF | 'crocodile' |
|  |  |  | muya | LH | 'catfish' |
| tis. | H | bird | tiber | LHL | 'butterfly' |
|  |  |  | tise | HH | 'eagle' |
|  |  |  | tifimo | HFL | 'dragonfly' |
|  |  |  | tafi | HH | 'black bat (sp.)' |
|  |  |  | tixity | LHH | 'willy wagtail' |
|  |  |  | tipa | HH | 'heron' |
|  |  |  | tigu | HL | 'praying mantis' |
|  |  |  | tiry | HF | 'cassowary' |
|  |  |  | texio | HL | 'hornbill' |
| tiver | F | blade | tis. | F | 'machete' |
|  |  |  | talila | LHL | 'scissors' |
|  |  |  | taxnis | LHL | 'axe' (< Tok Pisin tamiok) |
|  |  |  | tax ${ }^{\text {a }}$ | LHH | 'knife' |
|  |  |  | tigu | HH | 'handle of a machete' |

In cases such as these the obvious segmentability allows the items to be elicited one syllable at a time, and also in paradigms, and so the underlying F on the first syllable of 'scissors' can be discerned. When we have a polysyllabic, non-segmentable root, this is not the case. With a form such as ifäg HHL 'spit(tle)', or pirare LHH 'scar', there are no morpheme breaks, and so no paradigmaticity: the first syllable of iffect cannot be heard in any context other than a following high tone, and so (keeping the two hypotheses presented for tonal melodies on disyllabic roots above in mind) we would not be able to determine whether this was underlyingly 'FHL', for instance. Examining trisyllabic roots would allow us to see whether the pattern observed in disyllables, that of disallowing a F before another F or a H , holds for longer words. Of the 27 logical possible combinations for trisyllables, illicit sequences of *FH or $*$ FF would occur in ten, disallowing them and thus predicting that we should find seventeen contrastive melodies. The following results emerge; putatively illicit melodies (following the tone sandhi rule proposed in (13)) have been marked with an asterisk.

Table 47. Tonal melodies on trisyllabic roots

| Length | Pitch contour | Tonal melody | Example |  |
| :---: | :---: | :---: | :---: | :---: |
| 3-б | 3(4)4-44-43 | HHH | 18゙bab | 'sandfly' |
|  | $\begin{aligned} & 34-43-21 / 34-33-21 \\ & 34-44-41 / 33-44-41 \end{aligned}$ | HHL | hahafa | 'slow' |
|  |  | HHF | apole | 'Gnetum sp.' |
|  |  | HLH | - | n/a |
|  |  | HLL | - | n/a |
|  |  | HLF | - | n/a |
|  |  | *HFH | - | $\mathrm{n} / \mathrm{a}$ |
|  | 44-41-11 | HFL | năipa | 'eight' |
|  |  | *HFF | - |  |
|  | 23-34-43 / 23-33-44 | LHH | mabiri | 'twenty-four' |
|  | 23-43-21 | LHL | kilpay | 'spider, octopus' |
|  |  | LHF | - | n/a |
|  |  | LLH | - | $\mathrm{n} / \mathrm{a}$ |
|  | 22-22-21 | LLL | 1-way | axe |
|  |  | LLF | - | n/a |
|  |  | *LFH | - | $\mathrm{n} / \mathrm{a}$ |
|  |  | LFL | - | n/a |
|  |  | *LFF | - | n/a |
|  |  | *FHH | - | $\mathrm{n} / \mathrm{a}$ |
|  |  | *FHL | - | $\mathrm{n} / \mathrm{a}$ |
|  |  | *FHF | - | n/a |
|  |  | FLH | - | $\mathrm{n} / \mathrm{a}$ |
|  |  | FLL | - | $\mathrm{n} / \mathrm{a}$ |
|  |  | FLF | - | n/a |
|  |  | *FFH | - | $\mathrm{n} / \mathrm{a}$ |
|  |  | *FFL | - | $\mathrm{n} / \mathrm{a}$ |
|  |  | *FFF | - | $\mathrm{n} / \mathrm{a}$ |

While it is true that the predicted gaps are not found in the data, it is also true that fully seven of the remaining seventeen predicted tone melodies are not found. Most interestingly, these gaps are not random. The following sections presents an alternative, better analysis of pitch in Skou as a word-level phenomenon.

### 2.3.1.4 Tone melodies and pitch contours

In the previous section, we saw that for trisyllabic roots ten different melodies are attested. Table 48 xx presents them again in a different arrangement to that seen in table 47 xx , in that the attested melodies are shown by the overall shape of their contour.

Table 48. Melodies associated with trisyllabic roots

| Attested: |  |  |  |  | Not attested |
| :---: | :---: | :---: | :---: | :---: | :---: |
| [ ${ }^{---}$ | [ ${ }^{-}$ |  | [\|- ${ }^{-}$-] |  | [ ${ }^{-}{ }^{-}$], [\|- - \], |
|  | [ $\left.\right\|^{-}$ | [\|- |  |  | [\|- ${ }^{-}$], [\|-- \], |
|  | $\left[\left.\right\|^{-}\right.$ |  |  |  |  |
|  |  |  |  |  | [\|\ - \], [|- \ -] |
| high | fall | rise | rise-fall | low | [ ${ }^{-}$-- $]$ |

The patterns of permitted tone melodies are clear: there are five word-melodies, which have different points of inflection (Donohue 1997) for the complex tones. A melody of the sort HLH or HLHL, which would underlie the possibly predicted, but not attested, patterns *[|\ - ${ }^{-}$] and *[ $\left.\right|^{-}$- \], respectively, is not a member of the five distinct tonal melodies that can be affiliated with the word. The patterns which were not predicted by virtue of being ruled out on the automatic tone-sandhi analysis mostly involve HLH or HLHL melodies. The other of the unexpectedly unattested tone patterns involve the appearance of a F in a word with a LHL melody, or the appearance of tonal changes on the antepenultimate syllable. These restrictions will be discussed in more detail in 2.4.2.

However, before abandoning the syllable-tone analysis we should examine the disyllabic data in the light of this word-tone analysis. If there is no correlation between the disyllabic word-melodies and those seen in trisyllables, then the analysis would lose credibility. Rearranging the disyllabic data in terms of the categories discovered for trisyllabic roots, we find the following patterns:

Table 49. Melodies associated with disyllabic roots

| Attested: |  |  |  |  | Not attested |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\left[^{--}\right.$] | [\|- -] | [ $-^{-}$] | [\|- \] | [\|- - ] | [ ${ }^{-}$-], [\|\ \] |
|  | $\begin{aligned} & {\left[\left.\right\|^{-} \backslash\right]} \\ & {[\mid \} \end{aligned}$ |  |  |  |  |
| high | fall | rise | rise-fall | low | fall-high, fall-fall |

Again the non-occurring patterns involve HLH or HLHL melodies, and the allowed patterns all fit into the five word tone patterns discovered for trisyllabic roots. It remains only to compare the apparently simple three-way distinction on monosyllabic roots with this analysis. Since only three pitches are contrastive on monosyllables, we need to develop a careful methodology in order to detect traces of a five-way contrast. Two factors can assist us:

- although rise and rise-fall are found as word melodies, there are no cases, in either polysyllabic or monosyllabic words, of a LH being associated with a single syllable;
- while no homophones exist in polysyllabic words, there are many homophones on monosyllables.

The first of these factors suggests that there is a highly-ranked constraint in Skou against the sequence LH associating to a single syllable. This would bar the direct realisation of either a LH or a LHL melody on monosyllables, which is the observed pattern. ${ }^{22}$

The second factor is also suggestive of an underlying tonal contrast that has collapsed some distinctions on monosyllables. While some degree of homophony is to be expected (the phonological resources of Skou only allow for 149 segmentally contrastive syllables, ${ }^{23}$ not an high total), we can examine the frequency of homophones, arranged by the phonetic pitch contours observed. We would predict that, all other phonotactic factors being equal, if there was a tonal category collapse, there should be a greater number of homophones present on these syllables representing the many-to-one collapse than for a phonetic pitch which only represents one underlying tone. This is shown graphically in table 50.

Table 50. Predictions of relative frequency of monosyllabic homophones

| Underlying tones: | X | Y |
| :--- | :---: | :---: |
|  | X | Y |
| Surface pitches: | X | $2 n$ |
| Homophones? | $n$ |  |

With this model in mind we can now examine the homophones found on monosyllables, and compare that with the prediction that both of the above factors have led us to: that LH and LHL melodies would be realised as one of the other melodies (phonetically [ $\left.\left.\right|^{-}\right],[\mid-]$or $[\mid \backslash]$ ), with a concomitant increase in the incidence of homophony in these tonal categories. Of course, this is not necessarily to claim that this is a synchronic process; enough to state that such a process has applied in the past. The results of a homophone search on a mini-dictionary file of approximately 700 words (a subset of the words listed in appendix 1) are presented in table 51. The lexemes are arranged by pitch, with the total number of syllables that show more than one meaning listed in brackets under the heading for the pitch category. In table 51xx below we can see that the monosyllable [ $[6]$ is ambiguous between the meanings 'black ant (sp.)' and 'yam'. The syllable [he], on the other hand, is four-ways ambiguous, with the meanings '(I/you(PL) close', 'nose', '(I/you(PL) walk', and '(I/you(PL) pound (sago)' (different conjugations means that some of the verbs are differentiated in other person/number/gender combinations; 'close' is yá in 3PL, whereas 'walk' is tá, for instance.

[^13]Table 51. Homophones in monosyllabic roots: high pitch

| Pitch | Homophones |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| High <br> (26) | bi | 'tree sp.' | bi | 'empty' |  |  |  |  |
|  | fi | 'louse' | fi | 'meet' |  |  |  |  |
|  | he. | 'close' | ha | 'nose' | ha | 'stand' | has | 'pound' |
|  | ҺE゙ | 'yawn' | he | 'oSpSi' |  |  |  |  |
|  | i | 'snake' | i | 'SpF, CH' |  |  |  |  |
|  | ja | 'cup, <br> glass' | ja | 'sea' | ja | 'wet place' | ja | 'noose' |
|  | ka | 'hit' | ka | 'armband' |  |  |  |  |
|  | ke. | 'I eat' | ka | 'tusk' |  |  |  |  |
|  | ks | 'catch' | ke | 'k.o. rope' |  |  |  |  |
|  | k ${ }^{\text {c }}$ | 'ask' | kE | 'shaman' |  |  |  |  |
|  | kge | 'beetle sp.' | k] | 'fence' |  |  |  |  |
|  | k | 'thorn' | k | 'under' |  |  |  |  |
|  | ku. | 'frog' | ku. | 'k.o armband' | ku | 'fall' |  |  |
|  | la | 'roast' | la | 'exterior wall' $\dagger$ |  |  |  |  |
|  | $\square$ | 'wash' | $\square$ | 'bud'* |  |  |  |  |
|  | lod | 'shave' | 1000000000 | 'ear' |  |  |  |  |
|  | lu | 'release' | lu. | 'cough' |  |  |  |  |
|  | l\# | 'hear' | l\# | 'chop branch' | l\# | 'blow' | l ${ }^{\text {a }}$ | 'ashes' |
|  | na. | 'splash' | ne. | 'sago bundle' |  |  |  |  |
|  | $\bigcirc$ | 'big wave’ | $\bigcirc$ | 'lime' | $\bigcirc$ | 'sago grub' |  |  |
|  | $\square$ | 'black ant' | $\square$ | 'yam' |  |  |  |  |
|  | pat | 'bedbug' | pa | 'chop.PL' | pat | 'husband' |  |  |
|  | pi | 'full' | pi | 'half-ripe' | pi | 'language' |  |  |
|  | FW | 'endure' | P00 | 'thick' |  |  |  |  |
|  | r | 'cloth' | r | 'matoa tree' |  |  |  |  |
|  | tor | 'beads' | trior | 'hot ashes' |  |  |  |  |

$\dagger$ Also láho. *Also riló, with rî 'tree'.
With low pitch we again see an impressive range of homophones, and again some syllables are up to four-ways ambiguous.

Table 52. Homophones in monosyllabic roots: low pitch

| Pitch | Homophones |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Low <br> (19) | a | 'cloud' | a | 'blackpalm' |  |  |  |  |
|  | fa. | 'betelnut' | fa | 'inner wall' |  |  |  |  |
|  | fu. | 'rain' | fu | 'see.F' |  |  |  |  |
|  | f | 'see' | $f \#$ | 'that' |  |  |  |  |
|  | has | 'bag' | ha | 'star' |  |  |  |  |
|  | he | 'coconut' | hen | 'peel' |  |  |  |  |
|  | hioi | 'drink' | hiui | 'edge' |  |  |  |  |
|  | i | 'well' | i | 'young' | i | 'pool' | i | 'line' |
|  | ku | 'dew' | ku | 'stab' | ku | 'child' |  |  |
|  | 1 B | 'clay' | 13. | 'mixing bowl' | 1 B | 'tuber meal' | 1 B | 'hit.F' |
|  | lor | 'work' | la | 'ant' |  |  |  |  |
|  | lu. | 'full' | lu | 'narrow' |  |  |  |  |
|  | 『 | 'burp' | $\square^{\square}$ | 'bamboo sp.' |  |  |  |  |
|  | pa | 'water' | pa | 'INSTR' |  |  |  |  |
|  | ¢\% | 'edge' | p6 | 'blow at fire' |  |  |  |  |
|  | tig. | 'canoe' | tis. | 'fish net' | tis | 'gall' | tiz. | 'last night' |
|  | i | 'hot' | ti | 'arrow shaft' |  |  |  |  |
|  | ya | 'grass' | ya | 'sister' |  |  |  |  |
|  | yo | 'cousin' | yu | 'brother' |  |  |  |  |

Falling pitch monosyllables also present homophones, but in no cases are there four-way homophones, and the number of homophones is in any case much less than with the other two pitches.

Table 53. Homophones in monosyllabic roots: falling pitch

| Pitch | Homophones |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall | $\varepsilon$ | 'cooked' | $\varepsilon$ | 'wife' |  |  |
| (10) | la | 'help' | la | 'prawn' | la | 'HM' |
|  | 13. | 'chop' | 13. | 'foot' |  |  |
|  | $1{ }^{\text {E }}$ | 'red ant' | $1{ }^{\text {E }}$ | 'fin' |  |  |
|  | ne. | 'flesh' | na | 'left(hand)' |  |  |
|  | $\square$ | 'ripe' | ■ | 'house part' | ® | 'penis' |
|  | pa | 'scratch' | pa | 'right(hand)' |  |  |
|  | pag | 'flower' | paid | 'steam' |  |  |
|  | pi | 'dry in sun' | pi | 'mountain' |  |  |
|  | $t$ | 'bow' | ta | 'SpM, SW' |  |  |

Some caveats need to be attached to the data in this table. Firstly, there is no contrast between high and low pitch for voiced onsets, so $\delta$ and $\dot{B}$ could equally well have been listed as (phonologically) low tone homophones rather than high tone homophones. The actual pitch realised on these syllables is in fact somewhat higher than that normally associated with phonologically low syllables, and somewhat lower than that associated with phonologically high syllables (see 2.4.1).

Further, several of the putative homophones are probably simply semantic extension. For instance, the part of a house designated by [ $[$ ] [ [ $]$ ] is a small dowel that joins two planks together in the flooring of a room; the homophony with 'penis' is likely to be a semantic extension, especially given that house building is an exclusively male affair. It is not too farfetched to suppose that 'ripe, ready' might well be a further, metaphorical extension of the same concept. The range 'sea', 'wet place' and 'cup, glass' for [ja] [|'] is a very obvious extension of a core meaning involving liquid and its containment, as is the range 'clay', 'pot' and 'pounded tuber dish (prepared in a pot)' for [lä] [|-]. (Further discussion on possible cultural semantic extension is presented in 9.3.) Nonetheless, we have a significant difference in the number of homophones. These are arranged for easy comparison in table 54. Quite clearly the high pitch $\left[\left.\right|^{-}\right]$and low pitch [|-] show twice as many homophones as does the falling pitch [|\].

Table 54. Frequency of homophones on monosyllables

| Tones: | H | L | F |
| :--- | :---: | :---: | :---: |
| Raw homophones: | 26 | 19 | 10 |
| Revised homophones: | 21 | 20 | 9 |

The simplest conclusion, given the suggestion that we are actually dealing with five underlying contrastive tonal melodies, is that phonetic $[\dagger]$ and $[\mid-]$ are each used to realise two underlying tones. Is there a principled method of determining which of LH and LHL are realised on which of $\left[\left.\right|^{-}\right]$and $[\mid-]$?

Given that a LH sequence is barred from appearing on the one syllable, we can propose a rule that dissociates LH from a syllable when it is associated with it. This would operate as follows:


This would predict that an underlying LHL tone melody would be realised as [|-] on a monosyllable. The other 'missing' melody, LH, is slightly more complicated. Simply dissociating the LH part of the melody is not a sufficient explanation, since that would leave no tone to be associated with the lexeme. Since a word is not phonologically well-formed without a lexical tone being associated with the syllabic tier, the rule of dissociation is blocked form applying completely, and only the first component of the melody is dissociated, leaving H free to associate with the syllable.




We can now update table 54 to reflect our understanding of the mechanics of Skou tone association with monosyllabic words. Table 55 shows the collapse in phonetic terms of different tone melodies when they are associated with monosyllables.

Table 55. Homophones and the predictions of absolute neutralisation in monosyllables

| Underlying tones: | LH | LHL |  |
| :--- | :---: | :---: | :---: |
| Surface pitches: | $\left[\left.\right\|^{-}\right]$ | $[\mid-]$ | $[\mid \]$ |
| Homophones? | 20 | 20 | 10 |

We can then see that, despite appearing initially to be a language with three contrastive tones, and having a productive tone sandhi rule that does satisfactorily account for the melodies found on disyllabic roots, the language does in fact contrast five tone melodies which are affiliated at the word level (Donohue 1997), and which show reduced contrasts in monosyllables. While a substantial reanalysis of the data in Skou, this new analysis is not without support. Skou is related distantly to the languages of the Serra Hills and Piore River families. While no detailed phonological work has been carried out on the Serra Hills languages, it is known that they possess tone systems with up to five or even six contrastive pitches on monosyllables. In the Piore River family Barupu has received treatment from Crowther (2000), who shows that there are at least five tone melodies (L, H, HL, LH and LHL) that are affiliated at the word level - the same melodies, and the same association principles, that we have just discovered in Skou. ${ }^{24}$ In the light of this information from other members of the Macro-Skou family, the reanalysis does not seem so surprising.

It is also in striking accord with speakers' reactions when checking tonal minimal pairs.
 'child' and $\mathcal{E}_{1}$ [ [|-] 'dew', would insist that they are not the same sounds, even though they 'normally' sound the same. If, for instance, 'bag' had the tone melody LHL and 'star' was simply L, we could account for speakers claiming that the words were different (= different underlying phonological structure), while acknowledging that the sound of the words was the same (= identical surface phonetic form).

The reader should not conclude from this that speakers are unaware of homophones. All speakers recognised the identity through semantic extension of, for instance, $s$ ' penis, dowel in

 would insist on the distinction, even though they admitted that they were pronounced in the same way when you speak. Some sophisticated speakers, while insisting that the words in question did sound the same, would invent ad-hoc tonal distinctions in order to prove that they were really different. These distinctions were not consistent from speaker to speaker, or from the same speaker at different times.

### 2.3.1.5 A model of the tone system of Skou

It remains to account for the differences in tonal association: an overall falling pitch on a disyllabic word is, for instance, supposed here to reflect an underlying HL tone melody associated with the word as a whole. The differences between the melodies [ ${ }^{-}$-], [ $\$, ] and [ 'peanut', which would all logically be based on the tonal units H and L in that same sequence,

24 Crowther reports for Barupu, which also has a process of tonal simplification on monosyllables (unlike Skou, this simplification is in Barupu), that the tonal melodies are also dissociated from the left, matching the Skou analysis presented here.
have not yet been explained. It seems that there is a further phonological stipulation, in addition to the lexical specification of the tonal melody. For contour tone melodies we additionally need to specify the presence or absence of a phonological accent, and if one is present, also its position. (This accent, and its function, is similar to the analysis of 'inflection point' in Usarufa, found in Donohue 1997). The words meaning 'green tree frog', 'scorpion' and 'peanut' are differentiated as follows, with the asterisk indicating the accent.

Table 56. Homophones and absolute neutralisation in monosyllables

|  |  | Syllable | Tone association | Pitch contour |
| :---: | :---: | :---: | :---: | :---: |
| 'frog' |  | $\sigma \sigma$ | $\sigma$ \% | [ $\vdash^{-}$] |
| 'scorpion' | [fīili] $]$-HL | $\sigma \sigma$ | $\begin{array}{ll} H \\ \text { H L } \\ \sigma \end{array}$ | [ $-\backslash$ ] |
| 'peanut' | [ley]-HL | $\begin{gathered} { }^{*}{ }^{*}{ }^{\circ} \\ * \\ \hline \hline \end{gathered}$ | $\begin{aligned} & 4 \mathrm{~L} \\ & \mathrm{H} \\ & \sigma \\ & \sigma \\ & \mathrm{~N} \\ & \mathrm{H} \end{aligned}$ | [\ - ] |

Since it is impossible to determine the tone melody associated with a monosyllable with a high or low phonetic pitch in most cases, and since the notational diacritics ' and ` adequately describe the patterns found in Skou (both the underlying tone melody, where it can be determined, and the inflection point for tonal association), they alone shall be used to represent pitches in the description that follows.

### 2.3.1.6 Grammatical uses of tone/pitch

In addition to lexical distinctions being marked by tone, at least one grammatical category, tense, is marked by pitch differences alone. In past tense the pitch of any verb is always realised as low, regardless of the lexical tone (normally) associated with that word.

Non-past tense forms

| ni huo [44 41] (< [41 41]) | ni hae [44 44] | ni hiồ [44 21] (< [41 22]) |
| :---: | :---: | :---: |
| fall-fall | fall-high | fall-low |
| 'I sew' | 'I stand' | 'I drink' |

## Past tense forms



The change in the pitch realised on the verbs can be best accounted for by a rule of tonal stripping that is part of the phonological specification of the past tense morpheme (other specifications of this morpheme include incompatibility with reduplication - see 7.9). (24) and (25) show the different processes associated with tonal association in both non-past and in past tenses for hù 'sew'.

Non-past tense


Past tense
(25)


More details on the formal characteristics behind tonological processes can be found in the following sections. The following section deals with the phonetic effects of phonological nasalisation, and the differences between phonetic and phonological nasalisation.

### 2.3.1.7 Excursus: brief comparison of the tone systems of related languages

Having discussed the tonal system of Skou, we can quickly compare this system with that found in the other, related, languages of the family. The essential points of the Skou tonal system may be summarised as follows:

- there are five underlying tone melodies, L, H, LH, HL and LHL;
- the sequence *LH may not be realised on a single syllable, but only spread over multiple syllables in such a way that there is no rise phonologically assigned to a single syllable (this limits the number of contrasts on monosyllables to three);
- with complex tones not involving the sequence LH there is an additional contrast in the placement of an accent in the word, anywhere in the final two syllables of the phonological word.
Comparing these defining criteria to those that we need to postulate to describe the prosodic systems of those other languages of the Skou family for which we have adequate data, we find a very high level of congruency.

In Puare, a language of the Serra Hills group, (see figure 2 in 1.4) the following factors are relevant to a description of the tonal system:

- there are five underlying tone melodies, L, H, LH, HL and HLH;
- the sequence *HLH may not be realised on a single syllable, but only spread over multiple syllables (this limits the number of contrasts on monosyllables to four);
- with complex tones there is an additional contrast in the placement of an accent in the word, anywhere in the final two syllables of the phonological word.

While not identical to the Skou system, the variation is minimal. In Sumo, a language of the Piore River branch of the family, the following appear to be the governing conditions (the Sumo data is less well documented than the Puare or Skou data):

- there are five underlying tone melodies, L, H, LH, HL and LHL;
- the sequence *LHL may not be realised on a single syllable, but only spread over multiple syllables in such a way that there is no rise phonologically associated with a single syllable (this limits the number of contrasts on monosyllables to four);
- with complex tones there is an additional contrast in the placement of an accent in the word, anywhere in the final two syllables of the phonological word.
Barupu, closely related to Sumo (Crowther 2000) shows essentially the same system, except for the addition of a HLH melody, and the possibility of any of the tonal sequences occurring on a single syllable.

Finally, in I'saka, a higher-level relative to all the languages mentioned above (again, see figure 2 in 1.4, and Donohue and San Roque 2004), we can describe the tonal system as involving:

- five underlying tone melodies, L, H, LH, HL and LHL;
- the sequence *LHL may not be realised on a single syllable, but only spread over multiple syllables (this limits the number of contrasts on monosyllables to four);
- with complex tones there is an additional contrast in the placement of an accent in the word, its presence being contrastive only on the last syllable of the phonological word.
We can compare these different constraints in table 57 , from which we can see that the similarities shared in the tonological systems of the different (related) languages far outweigh the differences.

Table 57. Tonological systems of different Skou languages compared

|  | Skou | Puare | Sumo | I'saka |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Underlying | L, H, LH, | L, H, LH, | L, H, LH, | L, H, LH, |
| melodies | HL, LHL | HL, LHL | HL, LHL | HL, LHL |
| Monosyllabic | L, H, HL | L, H, LH, | L, H, LH, | L, H, LH, |
| contrasts |  | HL | HL | HL |
| Accent domain | $\ldots[\sigma \sigma] \#$ | $\ldots[\sigma \sigma] \#$ | $\ldots[\sigma \sigma] \#$ | $\ldots[\sigma] \#$ |
| Accent/Tone | HL | LH, HL, | LH, HL, | LH, HL |
| cooccurrence |  | LHL | LHL | (LHL?) |

Compared to the possible variation that is attested in tonal systems around the world, and in New Guinea in particular (Donohue 1997), we can see that only micro-parametric change is required to shift from one system to another in this family. While more work is clearly needed before we can reconstruct the tone system of the proto-language with confidence, it is unlikely to be very divergent from something involving five or possible six tone melodies associated with word-level phonological units, contrastive accent placement on the last two syllables of the phonological word, and a restriction on the appearance of overly complex tonal units on single syllables.

Other more finely grained typological details, such as the behaviour of tone in compounds, also appears to show similar traits (right dominance) in the languages for which we have data, lending further evidence that the tonological systems we can observe in the modern Skou family languages reflect an earlier system not too different from the current exponents.

The tentative hypothesis that the Skou languages might ultimately be related to those of the Lakes Plains (see Clouse 1997 for a description of this family) is also (circumstantially) supported by this phonological typology. In Kirikiri, a language of the Central Lakes Plains family the same L, H, LH, HL and LHL units are found, with contrasts in the contour tones depending on the placement of an accent. This is strikingly similar to the analysis of Skou presented here, except that in Kirikiri the accent is contrastive within the syllable at the moraic level (Clouse 2002 pc .), and there are no constraints on the realisation of tone melodies on single syllables. Further work investigating more rigorously the putative relationship between the two groups of languages remains to be carried out, though there are some promising lexical cognates (such a pLP *fli 'louse', pSkou *fi).

### 2.3.1.8 Tone in compounds

When two lexical roots are compounded together, a process very frequent in forming the names of things (see 2.3.1.3), the tonal specification of the final element of the compound is spread over the whole word; the two tones do not interact, other than to disassociate the first lexicallyspecified tonal melody. For instance, the general classifier for flying creatures is táng 'bird', which has a high pitch, $\left[\left.\right|^{-}\right]$. The name of a particular species of large bats is tangóe, with a low, then high, pitch: $\left[\left.\right|^{-}\right]$. This can be assumed to be the result of the H tone melody of 'bird' being overwritten by a LH melody that is associated with the specifier -oe 'bat species'. The process can be modelled as follows:


A complex tone melody may also be overwritten in this way. In the following example the compound tángrúe 'handle of a machete' displays a $\left[\left.\right|^{--}\right]$contour, reflecting a H melody. When it is independent of the compound the element tàng 'blade' is found with a [ $\| \mathrm{]}$ ] pitch, reflecting a HL melody. Clearly the H melody of the second element of the compound overwrites the complex melody of the first.


The only apparent exception to such overwriting of tones is found when the tone of the last element in the compound is a low tone. Low tones do not cause the tone of the rest of the compound to dissociate, but are rather themselves overwritten or ignored. ${ }^{25}$ Thus, for example, we might expect that salt, a compound composed of $t i \mathrm{H}$ 'sea' and $n a \mathrm{~L}$ 'flesh', would appear with a L tone melody spread over the two-syllable word. This is not the observed result, with the compound having a high tone throughout: tíná.


This is suggestive of an analysis by which a L tone melody affiliated with a word is in fact the absence of an assigned H tonal unit, in isolation or in combination with other tonal units. This is an analysis to which I shall return in chapter 7, where I discuss the behaviour of apparently toneless clitics.

The morpheme kung LHL, which might be loosely glossed on its own as "crustacean" or "arthropod" (the difficulty being that it never occurs on its own), provides further evidence of the spread of tones over the domain of a L melody. When kúng, which appears as a highpitched syllable meaning 'small crab species' when it occurs alone in elicitation environments, is found with a following morpheme specified for a L tone melody, the LHL of kúng overwrites the L and spreads over two syllables, being realised as one L and one HL syllable. Similarly when an apparently disyllabic L-melody morpheme is added to kúng the LHL melody spreads over the resulting three syllables, surfacing as $\mathrm{L}, \mathrm{H}$ and L .
(29)

(30)

| k ij | W a ${ }^{\text {a }}$ |
| :---: | :---: |
| V | + V |
| $\sigma$ | $\sigma \sigma$ |
| $\stackrel{\mid}{(\mathrm{L}) \mathrm{H}(\mathrm{~L})}$ | $\underset{L}{V}$ |
| $\left[^{-}\right]$ | (not found in- |
|  | dependently) |
| 'crustacean' | 'hermit crab' |






'hermit crab'

[^14]Further examples of different tones being overwritten by others in lexical compounds can be found in appendix 3.

Double overwriting is also found, when a trisyllabic compound is created by compounding a monosyllable to an existing compound, and so creating a word that has the structure $\left[\left[\left[\operatorname{root}_{1}\right]_{\omega} \operatorname{root}_{2}\right]_{\omega} \operatorname{root}_{3}\right]_{\omega}$. One such compound is tángrángpoe [|- - _] 'twelve-wired bird of paradise', which is composed of tángráng $\left[\left.\right|^{-}\right]$'bird of paradise' and poe HL 'twelvewired bird of paradise’, where tángráng is itself a compound of táng [|-] 'bird’ and ráng [|-] 'sun'. When táng and ráng combine there is no change in tone, since both specify a H melody. The final compound has a single H melody, that which is lexically associated with ráng. When combined with the species name, poe $[\backslash \backslash]$, which does not occur on its own, the HL pitch of this element overwrites the H associated with the compound tángráng.

In addition to the tone of the first element overwriting the low tone in the second element of the compound, the combined syllable structure of the compound is the domain for the association of tonal accents. This can be illustrated with the following compound, 'tulip leaves', composed of the elements ápólè 'kind of edible leaf; tulip', with a H'L melody resulting in a [|- - \] pitch contour, and ha 'leaf', which has a L melody and so a [|-], pitch contour. Here we can see, through the shift in the accent, that the tone association of the first element in the compound has not simply combined with the second element, but rather has overwritten it. The resulting pitch contour shows an accent on the syllable that constitutes the morpheme 'leaf', which previously showed no evidence of such a specification: $\left[\left.\right|^{---} \backslash\right]$.



Not only is the HL tonal melody of ápólè spread over the entire compound, but also the information regarding the final position of the accent is now applied to the compound as a whole, with a constant final-syllable placement. Clearly not on the tone melody must be thought of as being autonomous from the syllables to which it is assigned (and so $a-\mathrm{H}, p o-\mathrm{H}, l e-\mathrm{HL}$ must be rejected as an analysis), but the accent must also be seen as simply applying to whichever syllable meets the correct prosodic position in the domain in which it is associated. Since the domain of autosegmental association is the word, not the morpheme, this means that although a penultimate position would be legitimised by the phonological constraints of the language, there are in fact no particular associations between the le syllable of ápólè and the accent, which simply seeks the final syllable in the word, and so in a compound applies to the final syllable, regardless of whether or not that syllable was part of the lexeme for which the accent was specified.

A similar example of low pitches being replaced with higher pitches in compounding can be seen in the word pátángke 'kingfisher', which is morphologically composed of the roots pa L 'water', táng H 'bird', and the bound form kè HL 'kingfisher'. We can hypothesise that the L melody of 'water' is erased by the following H in 'bird', by the principle that L tones are always overwritten by a more specified tone melody, leaving a H-melody compound. We do, however, have direct evidence (from the phonetic forms heard) that any subsequent H -tone
melody on the two syllable compound is then erased by the presence of a non-L tone melody on the final element of the compound, the HL. The final resulting three-element compound displays only the tonal characteristics predictable from the HL melody of the final element in the compound.

One useful consequence of this rule of tonal suppletion in compounds is that it allows us to investigate the tone of a monosyllabic lexical item when it appears spread over two or more syllables, thus offering a positive answer to the question of whether or not there are more underlying phonological contrasts on monosyllabic roots than appears to be the case based on the phonetic data of them in isolation. For instance, the noun hòe 'sago' is a monosyllabic root pronounced with a falling pitch: hòe $[\mid \backslash]$. When it is combined with a following element, and that element has a lexical low pitch, then, by normal conventions, the tone of the first element of the compound prevails, in this case the HL melody of 'sago', and is spread over the now disyllabic base. We would expect the disyllabic compound to shown a [ $\left.\left.\right|^{-}-\right]$pitch contour, assuming that the HL contour associated with hòe spreads over the whole compound, by analogy with the tone spread in cases like the following compound or pá 'house' and ràng 'house pole'.


In this example the tone melody that is realised as a falling pitch on one syllable spreads over two syllables to a disyllabic expression with one syllable bearing a high pitch and the other bearing a low pitch. Identical patterning is found when kue-HL 'jaw'26 combines with ta L ‘hair' resulting in kúeta [ [|- ]'beard’. This would be our expected target for the compound composed of hòe 'sago' + na 'flesh', since hòe has a falling pitch, and na is low-pitched, and hence sees its tone melody overwritten. In fact we find a falling-low pitch contour, $[\mid \backslash-]$. This gives evidence for the tone melody associated with hòe in fact being a 'HL melody, and not either a H'L or a HL melody.


26 This morpheme is not found as an independent lexical item: kúeé 'jaw+bone' is the normal collocation for 'jaw', with the H tone melody of $e ́$ 'bone' spreading over the whole compound. Speakers are, however, able to produce the syllable in isolation.


Three-syllable (and longer) words show exactly the same pitch contour possibilities as are found for two-syllable words; furthermore, when observing trisyllabic (and longer) words we find that there are no accents located further than two syllables from the right edge of the word. Examine the following possibilities for the pitch realisations of a HL melody on a trisyllabic word. Only the first three patterns are attested, with the final pitch pattern not found in Skou. This final possibility would appear in a word that had the HL melody combined with an accent on the antepenultimate syllable, but while the melody is clearly acceptable, the antepenultimate accent placement is not found in the Skou data.

|  | No accent | [ ${ }^{--}$-], [ $\left.\right\|^{--}$] |  | kúkúfa 'quick' |
| :---: | :---: | :---: | :---: | :---: |
|  | Accent on the ultimate syllable | [ $\left.\right\|^{--}$\] | $\underset{\mathrm{H}}{\sigma \quad \sigma}$ | nápánghi <br> 'six’ |
|  | Accent on the penultimate syllable | [ ${ }^{-}$\ - ] | $\underbrace{\sigma \quad \sigma}_{H_{L}^{\prime}}$ | hátòpu ‘comb’ |
| * | Accent on the antepenultimate syllable | [\|\--] | $\underbrace{\mathrm{N}}_{\mathrm{H}} \mathrm{~L}_{\mathrm{L}}^{\sigma \sigma}$ | - |

Why should there be this restriction on the placement of an accent? There are no clear answers, but it is worth noting that there are (almost) no unambiguously trisyllabic roots in the language. While there are many trisyllabic words, they are all composed of more than one morpheme. Some of the more convincing roots are plant terms, such as sangbiki 'pumpkin' and the already-mentioned ápólè 'kind of edible leaf; tulip’, but even these are questionable, given, for instance the existence of the root pó 'vegetable', and the frequent pseudo-prefixal element $a$ in plant names, and the word pupúki 'eggplant', with the same final syllable -ki and the same LHL melody as sangbiki, which is in any case a loan word (it is attested in Manado Malay, though not in current Papuan Malay). Only one possibly quadrisyllabic animal name, ibábúeli 'wasp', is known, but almost all other trisyllabic words have an easily identifiable first syllable
that is clearly a generic or species designator. This restriction on the shape of roots may influence the phonological possibilities on multisyllabic roots.

### 2.3.1.9 Tonal suppletion and tonal stripping

The previous section has demonstrated that a low pitch is always overwritten when it occurs in competition with another tonal melody, in a compound, regardless of precedence. There is, however, one instance in which a low tone appears to overwrite other tones, indicating that complex autosegmental interactions are occurring.

Past tense in Skou is not marked by any segmental changes or additions, but is indicated by a low pitch on the verb (It could be argued that past tense is segmentally marked by the absence of reduplication, found in future and intentional clauses, and the absence of an auxiliary, found in continuous and intentional clauses. More positively, however, these other TAM categories do not show the tonal behaviour that is unique to the past tense). Compare the following examples, which show the pitch patterns in two different tenses for three different verbs. The tenses shown contrast a future tense, marked by reduplication, with a past tense.

Table 58. Pitch correlates for tense

|  | future |  | past |  |
| :--- | :--- | :--- | :--- | :--- |
| 'roast' | lala | $\left[\left.\right\|^{--}\right]$ | la | $[\mid-]$ |
| 'vomit' | yaya | $[\mid--]$ | ya | $[\mid-]$ |
| 'scratch' | papa | $\left[\left.\right\|^{-}\right]$ | pa | $[\mid-]$ |

The simplest account of these alternations is that the verbs 'roast', 'vomit' and 'scratch' (and many others like them) are assigned a tone melody lexically (H, L and HL, respectively), which is realised (with appropriate tone sandhi) in the future, and other, tenses. In the past tense, however, the lexical tone melodies are stripped off in the past tense, leaving a syllable without any associated tone melody. The default pitch for a syllable is low, so this process of tonal stripping effectively replaces the whatever pitch contour would be associated with the lexical tone with a low pitch. We can model this for the case of 'scratch', a lexeme with a falling pitch, as shown in (35).

| $p \mathrm{a}$ |  |  | p a |  | p a |
| :---: | :---: | :---: | :---: | :---: | :---: |
| V | + | $\rightarrow$ | $V$ |  | V |
| $\sigma$ |  |  | $\sigma$ |  | $\sigma$ |
| $\widehat{\mathrm{HL}}$ | $\bigcirc$ |  | (H) (D) |  | (low pitch by default) |
| [/\] | (not found independently) |  |  |  | [\|-] |
| 'scratch' | [PAST TENSE] |  |  |  | 'scratched' |

This 'tonal stripping' model suggests an answer to the question of why the low tone manages to overwrite a lexically specified tone here, but in compounds is always overwritten, regardless of its position in the string of morphemes. While the compounding places two melody + segment units in a single prosodic word, the case of past tense low tone suppletion takes a melody + segment unit, the verb root, and adds a tone melody that has no segments associated with it. The only realisation of the tense morpheme is the tonal melody, while the verb root has
both a tonal melody realisation and a segmental realisation. For this reason the L tonal melody is 'allowed' to overwrite the lexical tonal melody of the word.

If this sort of tonal suppletion were not allowed, of course, we would never see any evidence for this morpheme, since it has no segmental form. We could theoretically posit any number of suprasegmental morphemes that do not successfully overwrite the tone associated with the segmental item (for instance, by being the first element in the 'compound' with the lexical element), but there would be no evidence for their existence.

Another case of a probably tonal morpheme is found when we examine the forms of the plain pronouns and compare them with the genitive and dative pronouns. The different sets are given in table 59.

Table 59. Free, genitive and dative pronouns compared

|  | Free pronoun |  | Genitive Pronoun |  | Dative pronoun |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1SG | ni | [/\] | ni | [/\] | ne | [\|-] |
| 2SG | me | [/\] | $m e$ | [ [ ] ] | me | [\|-] |
| 3SG.NF | ke | [ $[-]$ | k e | $\left[^{-}\right.$] | $\mathrm{k} e$ | [\|-] |
| 3SG.F | pe | [\|-] | pe | [/\] | pe | [\|-] |
| 1PL | ne | [\|-] | ne | [/\] | ne | [\|-] |
| 2PL | $\varepsilon$ | [ [-] | $\varepsilon$ | [ $/$ ] | $\varepsilon$ | [\|-] |
| 3PL | $t \mathrm{t}$ | [ [-] | $t \mathrm{t}$ | [ $]$ ] | $t$ | [\|-] |

The appearance of a high pitch on the 3SG.NF.GEN pronoun, rather than falling pitch, is discussed in 2.5.1.

Just as with the past tense being marked by a low tone that overwrites the tone of the lexical item, we can most easily account for these pronominal data by assuming that the free pronouns represent the most basic forms of the pronouns, and that the genitive pronouns are formed by the addition of a (no longer productive?) morpheme (or formative), 'genitive', realised by a falling pitch $[\ \]$. The dative set is formed by the addition of a frozen dative morpheme, 'dative', which is realised both segmentally and suprasegmentally; segmentally, the rime of the syllable is replaced by $\tau$, and suprasegmentally the pitch of the pronoun is replaced by a syllably not associated with any tone melody, the syllable thus being realised at a low pitch [|_]. In both cases the tones of these derivational morphemes overwrite the tone of the underlying pronoun, and so again we see a case of tone a low pitch apparently 'overwriting' a more complex pitch. In the case of the dative the low pitch is associated with some segmental material as well, the vowel $\boldsymbol{\varepsilon}$, which replaces the lexically-assigned syllable rime. In the case of the dative set we can see that there is a vowel associated with the morpheme that has no corresponding position on the syllable tier, and so is realised by overwriting the vowel of the pronoun. The combination of the first person singular pronoun and the dative formative is shown in (36), showing both the overwriting of the HL tone melody associated with first person singular, and the overwriting of the vowel as well.



We can demonstrate the need to posit a segmentally specified, but syllabically deficient morpheme by contrasting the dative morpheme with the focus marker $=a$. This morpheme does not supplete the vowel of a pronoun to which it attached: mè a 'you PROM', not * mà, as shown in (37). Alternative explanations for the realisation of the lexical vowel in $m e ̀=a$ could be that it is it a clitic boundary, not an affix boundary, which separates the two morphemes, or that the dative morpheme has been unproductive for so long that a degree of grammaticalisation has applied between the original suffix and its host. xxxxxxx on nominals? xxxxxx


The examples seen in this section show that special behaviour is found with the low pitch in compounds when it is not associated with any syllable structure. The last example shows that even with segmental material, if that material is not linked to the syllabic tier the tone is still capable of overwriting the tone of the lexeme.

### 2.3.2 Nasalisation

Nasalisation is contrastive at the segmental level in Skou. In addition to being specified on a particular consonant or vowel, nasalisation also influences other segments in several ways:

1. it changes vowel quality;
2. it affects the production of neighbouring consonants;
3. it affects the production of neighbouring vowels

I shall address these points separately in the following sections.

### 2.3.2.1 Segmental effects of phonological nasalisation

Nasalisation acts acoustically to lower the first formant of the vowels on which it occurs, which has the effect of reducing the vowel space. This means that it is not unusual to find a collapse in the number of vocalic contrasts in the nasal vowels, and this is also true of Skou, in which n does not occur as a nasalised vowel, thus reducing the number of vowel contrasts in the language from seven to six when nasalised. We can contrast the two vowel systems as follows:

Table 60. Oral and nasalised vowel systems in Skou

| Oral | Nasal |
| :---: | :---: |
| i | 1 |
| E | $\varepsilon$ |
| a | a |
| $\stackrel{\square}{\square}$ | 3 |
| u | ii, |
| \# | - |
| $\square$ | E |

The vowels * and * ${ }^{\text {* }}$ show an historical merger in nasal syllables, such that a proto-Skou * has the rime $\begin{aligned} & \text { 亚 }\end{aligned}$ as its reflex in modern Skou (Donohue 2002b). Synchronically, however, where we would expect we in fact find iin. The synchronic alternation is apparent in the case of predicates with the vowels $\boldsymbol{\varepsilon}$ or $\boldsymbol{\sigma}$, which show inflection by vowel alternation for feminine. When not nasalised, these vowels show feminine with $\boxed{\infty}$, but when nasalised the resulting feminine form is ii.. This is discussed in context in 7.2.3, but the following examples illustrate the point. With lo we see that the regular feminine form simply involves raising the vowel to $\#$. 'Speak', however, starts with the same vowel, but shows a high back vowel in the feminine, which is what we would expect for a verb with $\psi$ as its lexical vowel. The irregular vowel alternation for 'speak' follows from the more important constraint against the coda $*\left[\begin{array}{l}\text { [ }\end{array}\right]$.
plain feminine

| lom | I\# | 'shave' |
| :---: | :---: | :---: |
| 尚 | Tĩ | 'speak' |
| l\# | 11 | 'hear' |

This illustration of different approaches to the elimination of $\mathfrak{\#}$ in synchronic and diachronic perspectives serves to illustrate the fact that historical processes are not necessarily the same as synchronic processes. Historically, when 7 became dispreferred, the vowel was lowered, in keeping with the general tendency for vowels to appear lower in nasalised rimes. In modern
morphophonemic alternations, however, the markedness relationship between the vowels has changed, and the height of $\psi$ is preserved, and the vowel simply appears as the most unmarked vocalic element that is both [+ high] and [+ round], which is u. A common allophone of the nasalised $u$ is, in addition to $\frac{i \pi}{i}$, also a syllabic velar nasal, in (suggesting that the constraint against $*\left[\begin{array}{l}\text { H }\end{array}\right]$ is partially operative for $\#[i \mathrm{iz}]$ as well). This is quite a perceptually striking allophone, with words such as 'she speaks', phonemically $/ \mathbb{1} \mathbf{j} /$, being produced as [min]. The nasal stop allophone is most common following $h$ or the nasals $m$ and $n$ : 'drink' [hem, 'deep' [min w, and 'kind of hand net' [imi], but [pric ~ [piti] 'liver'.

While there is, synchronically, a restriction on the kinds of vowels that may appear nasalised, there are no such restrictions on the identity of the consonant in the onset of a syllable that has a nasalised vowel: any consonant may be present, and nasalisation contrasts may be found on syllables with any onset. Examples of contrastive nasalisation on vowels with different consonantal onsets are shown in table 61 (not all the pairs here are minimal, due to tonal contrasts; note the syllabic nasal allophone of /iij/).

Table 61. Nasalisation contrasts in syllables with different onsets

| Onset | Oral | Nasal |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| F | pa | 'water' | [\|-] | pat | 'pus' | [\|-] |
| t | ta | 'hair' | [\|-] | 杪 | 'canoe' | [\|-] |
| k | kal | 'baked sago' | $\left[^{-}\right]$ | k | 'tooth' | [ ${ }^{-}$] |
| $b$ | ba | 'who' | $\left[^{-}\right]$ | bat | 'beach' | $\left[^{-}\right]$ |
| j | ji | 'break' | $\left[^{-}\right.$] | jì | 'fly' | [ ${ }^{-}$] |
| f | fa | 'inner wall' | [ ${ }^{-}$] | fic. | 'wing' | [ ${ }^{-}$] |
| h | has | 'bag' | [\|-] | hat | 'coconut' | [\|-] |
| w | wa | 'basket' | [ ${ }^{-}$] | was | 'sail' | [ ${ }^{-}$] |
| $y$ | ya | 'grass' | [ ${ }^{-}$] | yat | 'sick' | [ ${ }^{-}$] |
| r | ra | 'fire' | [\|-] | rat | 'ironwood' | [\|-] |
| 1 | la. | 'outside wall' | [\|-] | lax | 'clay' | [\|-] |
| m | mo | 'season' | [ ${ }^{-}$] | ms | 'sit (feminine)' | [\|-] |
| n | nu. | 'tree species' | $[1]_{-}$ | nit, mim | 'kind of net' | $\left[^{-}\right]$ |

In addition to lowering the height of vowels (see the allophones in table 33), nasalisation is also phonetically prominent on consonants in its immediate environment. A stop that immediately follows a phonologically nasalised vowel is often realised with some degree of homo-organic prenasalisation:
4äberol
[täbero]~
[tämbero]

Phonetic homoorganic prenasalisation is not found when the following segment is a fricative or the trill r :

| AEfi/ | 'black' | \{léngfi\} |
| :---: | :---: | :---: |
| [EEfi] |  |  |
| *[EMTfi] |  |  |

When a semivowel follows a nasalised vowel, there is sometimes both prenasalisation and stopping. This is shown in the following examples:

| ／tamato／ <br> ［t゙wato］～ <br> ［ticumato］ | ＇Cape Jar＇ | \｛ tangwáto \} |  |
| :---: | :---: | :---: | :---: |
| 「yyaz／ <br>  <br>  | ＇vomit repeatedly＇ | \｛ yangyang\} | （＜yang＇vomit＇） |

When the following consonant is the lateral $\lrcorner$ ，the lateral is sometimes realised with a degree of nasalisation，although this is rare．More commonly，the vowel following the lateral is more perceptibly nasalised than the lateral itself．As can be seen by the examples above，the vowel following a semivowel is not nasalised by spread：note that the vowel in the second syllable of tangwáto above，and also the second syllable in tangyúpa＇blue＇［tindepa］，neither of which
 ＊［tin（mi）

$$
\begin{align*}
& \text { なもに/ 'below' \{konglo\} }  \tag{43}\\
& \text { [klo] ~ } \\
& \text { [k16] ~ [kib] }
\end{align*}
$$

The putative prenasalisation of a following stop is of course undetectable when the
 preceding nasal vowel cannot be determined；it is certainly not perceptibly lengthened．It is worth noting，in this regard，that the lexicon contains relatively few examples of $\mathrm{V}[\mathrm{m} / \mathrm{n}]$ or $[\mathrm{m} / \mathrm{n}] \mathrm{V}$ ，despite their being no phonotactic constraints against these sequences．This implies that the lack of clear perceptual cues has resulted in the dephonologisation of the nasality on the vowel．

## 2．3．2．2 Nasal spread

The feature［＋nasal］is lexically assigned to individual segments，both vowels and consonants， but is also found，in varying degrees，on segments to which it has not been lexically assigned． Nasalisation spreads from phonologically specified segments to segments to other segments which are found to their right．Nasalisation is phonologically present only on vowels（other than $\boldsymbol{n}$ ）and the onsets $\alpha$ and（the first might arguably be $\dot{A}$ with a nasal tier attaching to it，but the absence of either phonological or phonetic $\Delta$ in Skou makes the analogy with $\dot{4}$ less transparent）．Despite this，we often find weakly nasalised pronunciations of segments that are not（and cannot be）contrastively nasalised phonologically．For instance，as a control we can note that the nasality found in the final syllable of the phrase in（44），

| $\mathrm{k} \varepsilon$ | $\mathrm{h}_{\boldsymbol{z}}$ | $\mathrm{f} \boldsymbol{z}$ | $\{$ ke hue fèng $\}$ |
| :--- | :--- | :--- | :--- |
| 3SG．NF | stomach | bad |  |

＇He＇s angry．＇
is only specified on the last vowel，and only it displays any nasality：all the preceding segments are oral，true to their lexical specifications．If the first syllable contains a segment that is phonemically nasalised，however，this changes．The phonological specification is as follows， with only the first stop and the last vowel nasalised．

| (45) | ni | h\# | fen | \{nì hue fèng \} |
| :--- | :--- | :--- | :--- | :--- |
|  | 1SG | stomach | bad |  |
|  | CV | CV | CV |  |
|  | N |  | N |  |
|  | 'He's angry' |  |  |  |

Because of the process of nasal spread, however, weak nasalisation is also found on segments to the right of the strongly-nasalised $\leadsto$ (solid lines indicate strong nasalisation, and dashed lines show weak nasalisation).


After the fully specified nasal onset in nì, weak nasalisation spreads rightward until interrupted by an oral consonant, in this case the $\lrcorner$. Despite the weak nasalisation spreading until interrupted by an oral non-sonorant, we can and must distinguish strong and weak nasalisation: weak nasalisation does not affect the quality of vowels to the same degree, and is not sufficient to induce prenasalisation on a following stop. Additionally, the weak nasalisation is found on all segments following the nasal stop, including the $n$, which cannot be strongly nasalised phonologically. Other examples of the spread of nasalisation, resulting in weakly nasalised vowels and no prenasalisation, which contrasts with strongly nasalised vowels and prenasalised stops, can be seen in (47). Here the weakly nasalised vowel (due to nasal spreading from the phonologically nasalised $/ \mathrm{n} /$ ) in the first syllable of 'five' does not induce prenasalisation on the following stop, whereas the phonologically nasalised vowel in the first syllable of 'four' does spread to the following consonant.
(47)

| nepa | nTp\% |
| :---: | :---: |
| five | four |
| 'five' | 'four' |
| [in a p a | n \% $\mathrm{m}_{\mathrm{p}} \mathrm{f}$ |
|  | $\wedge_{\mathrm{NN}} \quad \emptyset \mathrm{~N}$ |
| * [ n \#mpax] |  |
| $\sqrt{ }$ [ Cl ¢ a ] | * [nop\%] |

Some other examples of the association of phonologically contrastive nasalisation, and its spread and blocking in adjacent syllables, is given in the following tables. the first shows the spread of phonetic nasalisation through a non-oral consonant.
(48) nì ha tà
'I run'

| Segments: | ni | i | h | a | t | a |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Phonological nasalisation: | + | - | - | - | - | - |
| Phonetic nasalisation: | ++ | + | + | + | $\emptyset$ | $\varnothing$ |
| [nïliata] |  |  |  |  |  |  |

In (49) we have a different sentence exemplifying the same spread of nasalisation to the right, but here we can also see that the segment [ h$]$, adjacent to the phonologically nasalised
vowel but preceding it, is not nasalised. This is clear evidence that nasalisation does not simply spread to adjacent segments, but proceeds in a left to right fashion.
(49) hang e ang
'You all ate a coconut'

| Segments: | h | a. | e | a. |
| :--- | :--- | :--- | :--- | :--- |
| Phonological nasalisation: | - | ++ | - | ++ |
| Phonetic nasalisation: | $\emptyset$ | ++ | + | ++ |
| [hajea] |  |  |  |  |

In (50) we again see the rightward spread of nasalisation, from the consonant $n$ to the following vowel, and the absence of prenasalisation on a non-nasal stop following a weakly nasalised vowel.
(50) táng nì ká
'I shot a bird'

| Segments: | t | a. | n | i | k | a |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Phonological nasalisation: | $\emptyset$ | ++ | ++ | - | - | - |
| Phonetic nasalisation: | $\emptyset$ | ++ | ++ | + | $\emptyset$ | $\emptyset$ |
| [tãnüla] |  |  |  |  |  |  |

When a phonologically nasalised (that is, phonetically strongly nasalised) segment precedes an oral stop, that stop is realised with slight prenasalisation. The intrusion of the oral consonant blocks the further rightward spread of phonetic nasalisation.
(51) táng ke ká
'He shot a bird'

| Segments: | t | a | k | $\bar{c}$ | k | a |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Phonological nasalisation: | $\emptyset$ | ++ | - | - | - | - |
| Phonetic nasalisation: | $\emptyset$ | ++ | $+/-$ | $\varnothing$ | $\varnothing$ | $\varnothing$ |

[tänkeke]
Example (52) illustrates the same process of nasal spreading as (47), but with a different subject clitic shows that any induced prenasalisation is homo-organic with the following stop.
(52) táng pe wá
'She shot a bird'

| Segments: | t | E | F | $\varepsilon$ | w | a |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Phonological nasalisation: | $\emptyset$ | ++ | - | - |  |  |
| Phonetic nasalisation: <br>  | $\emptyset$ | ++ | +/- | $\varnothing$ | $\emptyset$ | $\varnothing$ |

The rightward spreading nature of nasalisation described here contrasts with the widespread appearance of leftward spreading of nasalisation in the other Skou languages. This typological difference is the result of the Eastern Skou languages losing the full contrast in nasalisation that is seen in Skou, where both the onset and the rime in a syllable may be independently specified for nasalisation; in the eastern Skou languages nasalisation is contrastive on the rime only if the onset is not specified as nasal.

### 2.3.2.3 Stress patterns

Identifying stress in Skou is problematic, since the usual primary phonetic correlate of stress, pitch movement, plays an independent role in Skou as the sole phonetic exponent of the tone system. The generally mono- or disyllabic nature of words in Skou also limits the amount that can be said. Nonetheless, certain stress patterns can be identified, and the (weak) realisation of this stress is independent of pitch assignment due to tonal prosody. There are no examples of words that differ in terms of the stress patterns while retaining the same tonal melodies, but we do find syllables with identical pitch behaviour showing different stress behaviour.

In a monomorphemic word stress is on the initial syllable, as in the following examples (only disyllables have been shown, since only monosyllabic and disyllabic words are unambiguously monomorphemic).

| (53) | í | 'snake' | [i] | [ ${ }^{-}$] |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| (54) | $e$ | 'board' | [ 8 ] | [\|-] |  |
| (55) | kíngue | 'green tree frog' | [1]#\#] | [\|-_]; |  |
| (56) | naké | 'dog' | [nake] | [\|--]; | *[na'ke] |

On these words stress is realised as a slight lengthening of the vowel in the stressed syllable.

Stress is thus completely predictable, and is assigned to the first syllable in a simple word. In a word with proclitics, we find that stress remains on the first syllable of the root, as in (57) (59), where the 3 SG feminine and non-feminine clitics $p e=$ and $k e=$ are not in the domain of stress assignment.

```
pe=p-e 'she boards' [p;'pc] [|- _]; *['pe pc]/*['ps pc]
pe=ueme 'woman' [pe'me] [|- _ ];; *[peme]
ke=naké 'male dog' [ke'nals] [|- - ]; *['knaks]
```

Under reduplication stress remains with the original root, and not with the reduplicant.

| (60) | $k e=k-a$ | 'he walks' | [ k ' ka ] | [\|- - ]; | * [ke'ke] |
| :---: | :---: | :---: | :---: | :---: | :---: |
| (60)' | $k e=k-a-k a$ | 'he is walking' | [ks'kaka] | [\|- - - ]; | *[keke'ke] |

Similarly, with a suffix such as the applicative -na (13.2) we similarly find not change in the position of the stress. Note that in (62) we seen an example of the genitive + dative morphology used to mark possession (6.3.1) not appearing with its own stress domain, even though it does form an independent phonological word for the purposes of tonal association (2.3.1.9).
(61) $k e=k-a-k a-n a$ 'he is walking to' [ks'kalkina] [|- _ _ _]; *[keka'kañe], etc.

```
naké-ni=ne 'my dog' [nakenine] [|- \ _]; *[nake'nine], etc.
```

As mentioned above, the perceptual and acoustic correlates of stress are not very strong, being easily eclipsed by the pitch contours associated with the lexical or grammatical tone associated with the word.

### 2.4 Minimal and near-minimal pairs

The following section exists to exemplify the phonologically distinctive functions of the different phonetic distinctions that have been described in the preceding sections. The contrasts presented here are by no means the only contrasts that could be invoked to illustrate the phonemic assertions made earlier, by they will serve adequately to justify them; further examples can be found in appendix 1.

### 2.4.1 Segmental minimal pairs

The following tables provide minimal or near-minimal pairs for the segmental distinctions shown earlier (for phonotactic restrictions, see 2.5). In each case only one, common, allophonic variant has been listed for each phoneme, and the orthographic representation has been given as well. In addition to these contrasts many more could be assembled from the lexical materials in appendix 1, and a great many additional ones could easily be put together, especially for consonants, given the material on verbal inflection in appendix 2.

Table 62. Consonantal contrasts

| Vowel |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| $p$ | [ ${ }^{-}$] | [ $\mathrm{p}^{\mathrm{Wa}} \mathrm{F}$ ] | pá | 'house' |
| $t$ | [ ${ }^{-}$] | [tia] | tá | 'elephant grass, mother in law' |
| $k$ | [ ${ }^{-}$] | [ka] | ká | 'ceremonial armband' |
| $b$ | [ ${ }^{-}$] | [ba] | bá | 'who' |
| $j$ | [ ${ }^{-}$] | [13a] | já | 'wet' |
| $f$ | [ ${ }^{-}$] | [fa] | fá | 'inner house wall' |
| $h$ | [ ${ }^{-}$] | [ha.] | há | 'nose' |
| w | [ ${ }^{-}$] | [wa] | wá | 'carrying basket' |
| $y$ | [ ${ }^{-}$] | [dzia] | yá | 'tall grass' |
| $r$ | [\|-] | [ra] | ra | 'fire' |
| $l$ | [ ${ }^{-}$] | [13] | lá | 'outer wall' |
| $m$ | $\left[^{-}\right]$ | [ma] | má | '(other's) mother' |
| $n$ | $\left[1^{-}\right]$ | [na] | ná | 'paddle' |

Contrasts between the seven oral vowels are shown in the following table, in both syllables with and without onsets. The choice of the onset $p$ to illustrate the vowel contrasts is not accidental, as this is by far the most phonotactically tolerant consonant.

Table 63．Vocalic contrasts

| Vowel | Orthography |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| $i$ | ［ $\mathrm{P}^{\text {wij }}$ ］ | $\left[^{-}\right]$ | pí | ＇half－ripe＇ |
|  | ［i］ | $\left[^{-}\right]$ | í | ＇snake＇ |
| $e$ | ［ $\mathrm{F}^{\mathrm{W}} \mathrm{E}$ ］ ］ | $\left[^{-}\right]$ | pé | ＇you catch（feminine）＇ |
|  | ［ E ］ | $\left[^{-}\right]$ | é | ＇bone＇ |
| $a$ | ［ $\mathrm{P}^{\mathrm{Na}} \mathrm{F}$ ］ | $\left[^{-}\right]$ | pá | ＇house＇ |
|  | ［a］ | ［｜－］ | $a$ | ＇cloud＇ |
| $o$ | ［po］ | $\left[^{-}\right]$ | pó | ＇vegetables＇ |
|  | ［0］ | $\left[^{-}\right]$ | ó | ＇lime（for betelnut）＇ |
| $u$ | ［po］ | $\left[^{-}\right]$ | pú | ＇you shoot＇ |
|  | ［u］ | ［／\］ | ù | ＇smell rotten＇ |
| ue | ［ PH ］ | $\left[^{-}\right.$］ | púe | ＇wallaby（sp．）＇ |
|  | ［ Y ］ | ［ 1 ］ | ѝe（te） | ＇sink＇ |
| oe | ［pla］ | $\left[^{-}\right]$ | póe | ＇heavy＇ |
|  | ［区］ | $[1]_{[-]}$ | óe | ＇kind of yam＇ |

We have already seen that there is no nasalised high central rounded vowel，＊［兹］，for historical reasons and with synchronic support（2．3．2．1）．Contrasts involving the six nasalised vowels are shown in table 64.

Table 64．Vocalic contrasts

| Vowel | Orthography |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| ing | ［ $\mathrm{p}^{\text {w／iz］}}$ ］ | ［ ${ }^{-}$］ | píng | ＇bench，table＇ |
|  | ［ī］ | ［｜－］ | ing | ＇（the）＇ |
| eng | ［ $\mathrm{p}^{\text {w }}$ ］$]$ | ［｜－］ | peng | ＇forget＇ |
|  | ［ E ］ | ［ ${ }^{-}$］ | é | ＇bone＇ |
| ang | ［ $\mathrm{p}^{\mathrm{wz}}$ ］$]$ | ［｜－］ | pang | ＇pus＇ |
|  | ［3］ | ［｜－］ | ang | ＇root used to make fish poison＇ |
| ong | ［p\％］ | ［｜－］ | pong | ＇blow（at fire）＇ |
|  | ［面］ | ［｜－］ | ong | ＇deception＇ |
| ung | ［p\％］ | ［｜－］ | pung | ＇liver＇ |
|  | ［ī］ | ［｜－］ | ung | ＇now＇ |
| ueng | ＊［ F 为］，etc． |  |  |  |
|  | ＊［䛔］ |  |  |  |
| oeng | ［［F］ | ［ ${ }^{-}$］ | póeng | ＇tongue＇ |
|  | ［回］ | ［｜－］ | oeng | ＇remember＇ |

We have seen minimal pairs differentiating the consonants and the vowels in this section． What remains are minimal pairs to establish the differences between the suprasegmental units， tone and nasalisation．

### 2.4.1 Suprasegmental minimal pairs

We have seen a six-way set of distinctions maintained only by the suprasegmental features of pitch and nasalisation, on a segmentally identical monosyllable, at the beginning of 2.3. In this section some additional contrasts will be presented.

Recall from 2.3.2.1 that there is no contrast in nasalisation for the [ m ] vowel, the result of a historical loss of contrast in the central vowels (Donohue 2002b). Note also that, while vowels are contrastively nasalised following nasal onsets, these contrasts are rare, and mostly involve the inflected forms of various verbs. Contrasts in nasalisation following nasal onsets are found in roots (such as shown in table 65 as well as table 68 below), but are rare.

Table 65. Contrasts in nasalisation

| Vowel | Oral | Nasal |  |  |
| :---: | :---: | :---: | :---: | :---: |
| $i$ | $p i$ | 'mountain' | ping | 'bow' |
| $e$ | fé | 'tomorrow' | féng | 'wind' |
| $a$ | ha | 'star' | hang | 'coconut' |
| $o$ | mo | 'you paddle' | mong | 'she sits' |
| $u$ | lú | 'Waromo' | lúng | 'Ormu, fly' |
| ue |  | - no | ntrast - |  |
| oe | óe | 'black ant' | óeng | 'memory' |

With tone there are many restrictions on cooccurence with different vowels or consonants, as detailed in the following section. Only monosyllabic contrasts are shown in the following table. No three-way contrasts for the mid front unrounded vowel $e$ could be found, since it is the vowel that suffers most from phonotactic restrictions. In some other cases

Table 66. Contrasts in pitch

| Vowel | High |  | Low |  | Fall |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $i$ | pí | 'speech' | $p i$ | 'swim' | $p \grave{\imath}$ | 'mountain' |
|  | lí | 'boil' | $l i$ | 'rotate' | lì | 'ruin' |
| $e$ |  |  | te | 'they' | tè | 'fence' |
|  | fé | 'tomorrow' | fe | 'fork' |  |  |
| $a$ | páng | 'husband' | pang | 'she eats' | pàng | 'flower' |
|  | lá | 'wall' | la | 'cold' | là | 'prawn' |
| $o$ | hó | 'strip, peel' | ho | 'front' | hò | 'whistle' |
|  | nóng | 'breast' | nongpong | 'four' | nò | 'hand' |
| $u$ | pú | 'you shoot' | pu | 'nest' | pù | 'conch shell' |
|  | húng | 'Sentani' | hung | 'edge' | hùng | 'vagina' |
| ue | rúe | 'rudder' | rue | 'handle' | rùe | 'horn' |
|  | húe | 'stomach' | hue | 'tread on' | Ни́ера | 'Palora clan' |
| oe | tóe | 'tree' | toe | 'beads' | tòe | 'she's angry' |
|  | póeng | 'tongue' | poe | 'thick' | Pòeng | 'Skofro' |

Leaving the segmental and suprasegmental description, the next section describes the many phonotactic constraints that pertain in Skou.

### 2.5 Phonotactics revisited

We have now seen the segmental (consonantal and vowel) and suprasegmental (tone and nasalisation) features described individually. If we were to examine the permutations of these as they combine to produce syllables, we would naively expect the following number of potentially contrastive phonetic syllable types (I am ignoring the suprasegmental differences created by accent placement, as that is not phonetically manifested on monosyllables):

| Position <br> Contrasts | Onsets <br> 14 | $x$ | vowels 7 | $x$ | tone melodies 5 | $x$ | nasalisation 2 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Examples | $\begin{gathered} \mathrm{p}, \mathrm{t}, \mathrm{k}, \mathrm{~b}, \mathrm{j}, \\ \mathrm{f}, \mathrm{~h}, \mathrm{w}, \mathrm{y}, \mathrm{l}, \\ \mathrm{r}, \mathrm{~m}, \mathrm{~h}, \varnothing \end{gathered}$ |  |  |  | H, L, HL, <br> LH, LHL |  | Ø, N |  |

The number of contrastive syllables is significantly less than this: a total of 413 syllable types are permitted in Skou, a remarkably small number. This can be ad hoc compared to Mandarin Chinese, a language that is similarly (approximately) monosyllabic for roots, and which has 383 segmental syllable types, multiplied by four tones (though admittedly with some gaps), yielding approximately 1,500 possible monosyllabic shapes. Some of the reasons for the small inventory in Skou have already been discussed (2.3.1.4, 2.3.2.1):

- n cannot appear nasalised;
- the tonal melodies LH and LHL cannot be instantiated on a single syllable

Even taking these restrictions into account, we would still expect a large number of syllable types:

$$
14_{\text {onsets }} \times\left(7_{\text {oral }} \text { Vs }+6_{\text {nasal }} \text { Vs }\right) \times 3_{\text {pitches }}=546
$$

different syllable types, which is still significantly greater than the number of possible syllables ( $30 \%$ greater). In this section I shall outline the other phonotactic restrictions that reduce the number of observed syllable types. ${ }^{27}$

### 2.5.1 Consonant and pitch

There are two restrictions on pitch of syllable that are governed by the onset. Since they cover different categories which are not mutually exclusive, one consonant is doubly restricted.

[^15]1. Falling pitch does not occur on syllables with an initial consonant that has a [+back] specification; this bars falling pitch from occurring in syllables with $k, j$, $w$ or $y$ as their onset.
2. There is no contrast between high pitch and low pitch on monosyllabic words with voiced stop onsets; put another way, the tone melody L may not associate with a word with a voiced stop onset in it, while LH, HL, LHL, and H are permitted. This reduces the number of contrasts found on monosyllables with $b$ or $j$ as onsets.
3. Related to the previous point, there are no words with a $L$ tone melody in which any syllable has a voiced stop onset. This means that if there is any $b$ or $j$ in an onset, the number of tonal contrasts for that syllable is reduced.
The first of these restrictions is phonetically-motivated: initial voiced stops show a lowered $\mathrm{F}_{0}$ with respect to their voiceless equivalents, and so there is less acoustic space for the putative contrast between a high pitch and low pitch to be realised, leading to perceptual confusion. The average frequency of the vowel in a syllable with an initial voiced stop would be lower than expected, and so liable to be confused with the typical $\mathrm{F}_{0}$ associated with a phonologically lowpitched syllable. The actual pitch on these syllables is between that of low pitched and high pitched syllables (judged based on the pitch heard when an equivalent syllable has a nasal onset or is vowel-initial, and so is not subject to $\mathrm{F}_{0}$ perturbations).

The explanation proposed here is that the reduced $\mathrm{F}_{0}$ (at least at the onset of the vowel) associated with this muscular action on a syllable that has been specified as having a high pitch has been reinterpreted as in fact showing no contrast with the typical (non-voiced consonant onset) $\mathrm{F}_{0}$ patterns found on phonologically low-pitched words (see figures 2 and three in appendix 1 for an example of how close the initial $\mathrm{F}_{0}$ of high pitched and low pitched words can be). This has then led to a reinterpretation of syllables with this voicing preconditioning of the $\mathrm{F}_{0}$ as in fact not displaying a phonological, and not just phonetic, contrast between a high and a low pitch. Since the main part of the vowel in these syllables is still greatly higher than in a phonologically low-pitched word, they are still interpreted as being phonologically high, and the phonologically low syllables, having been reinterpreted as not showing a distinction with the high-tone syllables, have been reanalysed as also being phonologically high tone.

The fact that this lack of contrast is extended to create a ban on polysyllabic words with a voiced stop onset anywhere in the word having a plain $L$ tone melody means that there is considerable interaction between segmental and suprasegmental processes in Skou. This is consistent with the apparent lack of a tonal root node intermediate between the tonal melody and the tone bearing units of the word (Donohue 2002d), and the next point, involving a restriction on falling pitch with $k$ or $j$ initial syllables. Note also that in polysyllabic words, including compounds consisting of individual monosyllabic elements, it is possible for a syllable with $b$ or $j$ as its onset to be realised with a low pitch.

A phonetic explanation for the absence of falling pitch on syllables with initial [+back] consonants is more complicated, but a plausible account can nevertheless be motivated. While there are few, if any, acoustic motivations for the restriction, we can formulate a plausible explanation in terms of articulatory gestures (after the manner of Erikson 1993). Firstly, we need to motivate the classification of the consonants in question as [+back]. While this may be obvious and uncontroversial for $k$, and not particularly questionable for $w$ (it does have [ $\mathrm{g}^{\mathrm{w}}$ ] allophones following a nasalised vowel -2.2 .1 .3 ), it is less immediately apparent why $j$ and $y$
should be characterised in this way. Again, the allophonic behaviour of these phonemes provides the justification that we need. The palatal stop $j$ shows dissimilatory phenomena with following vowels. When a low, back vowel follows, the realisation is palatal, but with a high front vowel a more backed articulation is heard: thus já 'noose trap for a pig' is heard as [ja], but jingpa 'fly (verb)' is [givimpa]. With $y$ there is not velar allophone, but the typical pronunciation of this phoneme involves a complex gesture, especially when the following
 rather than [j]. While these are still not [+back] sounds, according to traditional feature assignments, they do involve a process of backing in their articulation: the muscles that are responsible for the raising of the tongue root in the articulation of [+back] sounds, such as velars and uvulars, are also involved in pulling the tongue root back from the alveolar or alveopalatal position towards the palatal, and thus the muscular gesture is the same, even though the target is quite different.

The [+back] articulation requires a muscular gesture in the sterno-hyoid muscle, which in turn would affect the muscle tension around the vocal cords. This would not restrict a specification for a falling pitch per se, but the higher $\mathrm{F}_{0}$ that would be induced by the greater muscle activity involved in the tongue body raising has evidently been enough to mean that the overall fall is not sufficient for the phonologically HL syllables to be interpreted as showing a HL pattern, and not simply a H melody pattern, combined with intonational fall (compare figures 2 and 4 in appendix 2 for an appreciation of how much $F_{0}$ drop is associated with a phonologically high pitched syllable in any event). In this case, too, the inherent phonetic characteristics have been reinterpreted and reanalysed as phonological constraints. One possible historical pathway for this development is the following set of diachronically-ordered steps:

1. The intrinsic activation of the sterno-hyoid during the articulation of [+back] consonants to effect tongue retraction causes, through the tension transmitted to the muscles around the vocal cords, a reduction in the degree of fall that the $\mathrm{F}_{0}$ contour achieves. Phonologically falling pitches are still realised as falls, but the fall is not as long as that associated with the same phonological pitcharticulated with a [-back] consonant.
2. This new, shorter fall, is reinterpreted as not showing a sufficiently salient fall in pitch to be within the target range of a phonological falling pitch;
3. The fall is then reinterpreted as being a simple high pitch (which will, due to intonation phrase-edge effects, often fall somewhat anyway);
4. A phonological constraint is introduced into the phonological system to enforce this new interpretation, leading to a synchronic paradigmatic alternation between HL and H , and not just lexical tendencies in phonotactic combinations.
The only unusual step in this hypothesised pathway involves the reinterpretation of the lesser fall as being a phonologically high pitch. Why would a language allow such variation in its interpretations of phonological units, realised as different pitch contours? The answer is that for Skou, in most cases, the actual pitch contour associated with any given syllable is not such a salient characteristic as to require strict interpretational faithfulness, but rather it is the pitch contour for the word, determined by the lexical melody associated with that word, that counts. So, for instance, given a tone melody of the shape HL, and two syllables to assign to, any of the following pitch contours are acceptable:
(63) pále [pale] Possible pitch realisations: 44 22, 44 21, 43 22, 4321
 (not exhaustive)

This shows that for the speaker that realising the HL melody can be achieved with or without some degree of fall on either or both syllable. Crucially, the native speakers learns from the input available that level and (slightly) falling pitches can be interpreted as allotones of each other.

Now in most cases a HL melody associated with a single syllable will be part of a longer word; for instance, a word with a HL tone melody and an accent on the initial syllable. Possible contours will include:

| ìno | [inol | Possible pitch realisations: 42 21, 4211 |
| :---: | :---: | :---: |
|  |  | (not exhaustive) |
| 'banana' | H L |  |

Comparing the possible pitches here with those seen in (63) for a non-accented word such as pále 'pig', which is not associated as HL L, but as H L, we find that the range of possible falling pitch realisations are not that far apart. So when it came to producing a word with a HL L melody that has an initial $k$-initial syllable, we would have found the following variants, which are easily within the tolerances of variation observed for the H L pattern.
(65) kòepi [ky pi] Possible pitch realisations: 43 21, 4311

(not exhaustive)

This account relies on there having been, and still being, some degree of tolerance for the realisation of the tonal contours, combined with a strong degree of historical prejudice for phonetic norms. Donohue (2002) argues that Skou has shown strong normative traits in its phonological and morphological history.

Evidence for this position is found in the lack of falling pitches on syllables with a [+back] onset is a productive rule, not a lexical or historical accident. When marking the genitive the 3SG.NF pronoun is heard with a high pitch: $k e ́\left[\left.\right|^{-}\right]$, and not a falling pitch, as is found on the other genitives, such as 3 SG.F p $\grave{e}[\mid \backslash]$. This indicates that there is more than just a frequency restriction on the appearance of falling pitch on syllable with a [+ high] consonant in the onset, and that there is a principled rule at work that excludes falling pitches from appearing on syllables with initial [+back] consonants.

Another correlation between consonant type and pitch comes from an examination of loanwords. In general, words that are borrowed (directly or indirectly) from Indonesian/Malay with a penultimate stress pattern show a HL tone melody, if both syllables have onsets. One example is the place name Koya, currently a village area in the transmigration camp south of the Skou villages, and previously the name of a stretch of land in that area. This word is heard with a HL melody as Kóya in Skou (its adaptation to become part of the Skou lexicon, rather than representing an example of code-switching, is shown by the non-Malay pronunciation of the second consonant, [k母a], with a [ $\left.\right|^{-}$-] pitch, to be compared to the Malay [koja]). When, however, a word with voiced initial stop is borrowed, the normal pattern is disrupted by the requirement that the syllable with the contrastively voiced stop should appear with a low pitch association; this can result in complex tone patterns. For instance, the Malay word guru 'teacher', [unumu], is borrowed as kurù 'teacher'. In this word the penultimate stress of the original is represented by a HL melody, just as with Koya. The sole Skou velar stop, $\mathfrak{k} /$ is
found corresponding to the Malay (voiced) velar stop, but an additional $L$ tone unit is added to the phonological form to represent the voiced stop in the donor language. This results in a LHL tone melody, realised as a [|-\] pitch, preserving a trace of the original voiced stop through a reinterpretation of the $\mathrm{F}_{0}$-lowering properties of the voiced stop.

### 2.5.2 Vowel and pitch

There are no absolute restrictions on which vowels may occur with which lexical pitch values, assigned by the tone melody of the word: vowels of all seven distinctive qualities are found with all three different syllable pitches. There are, however, striking skewings in the frequencies with which the vowels occur with different pitches. Table 66 shows the overall frequencies, in percentage points, of the different pitch contours found in with syllables headed by vowels of different qualities, as well as a break down of the frequency of each vowel with each pitch contour. Values for a particular vowel which are more than $10 \%$ deviant from the overall tendencies have been shown in bold.

Table 67. Pitch contour frequencies by vowel quality (percentages)

|  | Pitch contour <br> high |  |  |
| :---: | :---: | :---: | :---: |
| Overall: | low | 47 | 37 |
| Vowels: |  |  | 16 |
| i | 37 | $\mathbf{4 8}$ | 14 |
| $\varepsilon$ | 50 | 30 | 20 |
| $\mathbf{a}$ | 48 | 33 | 19 |
| $\boldsymbol{a}$ | $\mathbf{6 1}$ | 31 | 8 |
| $\mathbf{u}$ | 51 | 35 | 14 |
| $\mathbf{\#}$ | 57 | 30 | 13 |
| $\mathbf{a}$ | $\mathbf{2 0}$ | $\mathbf{5 6}$ | 24 |

Despite the fact that all vowels do occur in syllables with each of the different pitch contours, there are clear preferences for high pitch to occur with i and $\boldsymbol{\sigma}$, and for low pitch to occur with $\boldsymbol{0}$. This might be a reflection of the inherent frequency associated with vowels of different heights: low vowels show low frequencies, and higher vowels higher frequencies (recall that in high pitched syllables, / $\mathbf{G} /$ is pronounced [ Y$]$ ). While explanatory of the deviant frequencies observed, it does not explain the highly normal values found for $u$ and $\boldsymbol{\psi}$. The normal values for a can be attributed to its very high frequency, and subsequent skewing of the overall pattern.

### 2.5.3 Consonant and vowel

There are very pronounced patterns of co-occurrence between the onset of a syllable and its rime. The voiceless consonants show no restrictions, and the non-nasal coronal sonorants $l$ and $r$ show preferential tendencies, though no absolute restrictions. The occurrence of $l$ and $r$ with the different vowels is shown in table 68, and typifies the frequencies found both with these two segments and the voiceless consonants.

Table 68. Non-nasal sonorant and vowel frequencies

| Vowels: | i | $\varepsilon$ | a | $\bigcirc$ | u. | 4 | $\square$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 3 | 11 | 16 | 6 | 6 | 5 | 12 | 59 |
| r | 1 | 4 | 5 | 3 | 4 | 2 | 2 | 21 |

The non-occurrence of $*\left[\begin{array}{l}{[i]}\end{array}\right]$ has already been mentioned (see 1.6, 2.3.2.1), as have the productive morphophonological changes that are employed to prevent its realisation synchronically. Additionally, there is an absolute restriction that roots may not appear with a nasal onset and the vowel $n$ in the rime; this is a phonotactic reflection of the presence of noncontrastive nasalisation on vowels when they occur after a contrastively nasalised segment, namely $m$ or $n$. The frequencies of the other vowels when they follow nasal onsets are skewed far from the overall frequencies, with a huge preference for the low vowels, as can be seen in table 68.

Table 69. Nasal consonant and vowel frequencies

| Vowels: | i | $\varepsilon$ | E | $\square$ | 1 | $\Psi$ | $\square$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathrm{mi}, \mathrm{ll}$ | 3 | 5 | 23 | 7 | 4 | - | 5 | 47 |

The remaining sonorants, $w$ and $y$, show even more restrictive patterns with respect to vowel co-occurrence. Neither of them frequently appears with the non-back rounded vowels $\#$ or $\square$, the sole exception being the word for 'hat', wawd. (This restriction is true of lexical roots, though some verbs with a $\psi$ or a vowel allow these sequences to occur in the 3SG.F or 3PL inflections, such as 'they squash', yz , or 'she waits', Win; see 7.2.2 for details on prefixal agreement patterns.) Additionally, $\bar{y}$ may not occur with the other front vowels, i or $\varepsilon$. (Again, this is found in some verbal inflection: 'they ask', te' or ye, 'they count', ya yi.) Both of the glides show strong preferences for the low vowel, just as has been seen with the nasals.

Table 70. Glides and vowel frequencies

| Vowels: | i | $\varepsilon$ | a | $\bigcirc$ | 1 | 4 | $\square$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| w | 2 | 4 | 5 | 2 | 3 | - | 1 | 12 |
| y | - | - | 9 | 2 | 2 | - | - | 14 |

Finally, the voiced stops $\mathbf{b}$ and $\boldsymbol{j}$ are both restricted to appearing only next to either low or front vowels; this means that the only rounded vowel that may follow one of these voiced stops is $\boxed{0}$. This, and the other restrictions, are all shown in table 71.

Table 71. Consonant and vowel restrictions

| Consonants: | i | $\varepsilon$ | a | J | u | \# | $\square$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathrm{p}, \mathrm{t}, \mathrm{k}, \mathrm{f}, \mathrm{h}$ | $\sqrt{ }$ | $\sqrt{ }$ | $\checkmark$ | $\sqrt{ }$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| 1, T | $\sqrt{ }$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| $\mathrm{m}, \mathrm{n}$ | $\checkmark$ | $\sqrt{ }$ | $\checkmark$ | $\checkmark$ | , | - | $\sqrt{ }$ |
| w | $\checkmark$ | $\sqrt{ }$ | $\checkmark$ | $\checkmark$ | $\sqrt{ }$ | - | $\checkmark$ |
| $y$ | - | - | $\checkmark$ | $\checkmark$ | $\checkmark$ | - | - |
| $b, j$ | $\checkmark$ | $\sqrt{ }$ | $\checkmark$ | - | - | - | $\checkmark$ |

The layout of the table reflects both the fact that the restriction that apply to voiced stop onsets are not in the same 'continuum' as those found with the other onsets, and also that there is a track of sonority operating in the co-occurrence restrictions: the more sonorous the onset, the smaller the number of rimes that may appear with it. It is also clear that the palatal glide 'counts' as much more sonorous than does the labio-velar glide; see 2.2.4 for discussion of the status of $/ w /$.

### 2.5.4 Vowel and Nasalisation

The only restriction of vowels cooccuring with nasalised syllables is the absolute ban on the appearance of *[兹]. When called for by synchronic rules, [ii] is heard instead. Historically, roots with *ien show reflexes with . Clearly, there has been a reinterpretation of the rules governing the non-appearance of $*\left[\begin{array}{l}\text { [i] }] \text {; historically the feature [-back] was preserved over }\end{array}\right.$ [+high], and synchronically [+high] is favoured over [-back].

### 2.5.5 Consonant, vowel and nasalisation

There is a complex restriction that constrains the high front vowel from appearing nasalised with other than a bilabial onset, $\mathcal{A}$, or no onset at all. That is, [ pii$]$, [ bii$]$, [ $\mathrm{k} i \mathrm{i}]$ and $[\overline{\mathrm{i}}]$ are heard, but none of the other nine onsets that can occur with [i] appear with this vowel when nasalised.

Table 72. The vowel [i]

| Consonant: <br> [ī] | P | t | k | $b$ | j | f | h |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\checkmark$ | - | $\checkmark$ | $\checkmark$ | - | - | - |
| Consonant: <br> [ī] | 1 | r | m | In | w | y |  |
|  | - | - | - | - | - | (-) |  |

This unusual restriction does not seem motivated synchronically by phonetic features or on the basis of a particular phonological natural class, but does have a historical basis. The consonants that display the ability to appear with a nasalised [iँ] are essentially the voiceless stops and the bilabials. This is the same group of stops that could appear as part of an initial cluster in proto-Skou, $* \mathrm{pl} * \mathrm{tl} * \mathrm{kl} * \mathrm{bl}$ and $* \mathrm{fl}$, and these clusters are still reflected in the more eastern languages (see Donohue 2002). Modern reflexes of these clusters ( $*_{\mathrm{p}} *_{\mathrm{t}} *_{\mathrm{k}} *_{\mathrm{b}} *_{\mathrm{m}}$ ) can appear with a nasalised [ $\overline{1}$ ] in their rime in Skou; the absence of a contemporary [ii] can be accounted for by noting that all modern occurrences of [ t$]$ reflect proto-Skou $* 3$, $\boldsymbol{*}_{\mathrm{d}}$ or $* \mathrm{j}$, and not a proto-Skou voiceless stop or bilabial (specifically $*$ t, which is reflected as $r$ in modern Skou). Just why this restriction should apply to one nasalised vowel is unknown, but the wellattested association between (high) front vowels and coronal stops is likely to be a contributing factor.

A second restriction involves consonantal and vocalic identity as well as the dimension of nasalisation. Although sequences of $[t]$ and front non-hight vowels are allowed, with both [ $\mathrm{t} \boldsymbol{\mathrm { z }}$ ] and $[t \square]$ acceptable in oral syllables, there are no occurrences of $*[t \in]$ or $*[t \overline{0}]$. This shows that non-back mid vowels cannot occur nasalised following a $t$.

## 2．5．6 Pitch and Nasalisation

There are no correlations between the pitch found on a syllable and the nasalisation setting for the vowel of that syllable；all contrastive pitch contours are found to occur with both nasalised and non－nasalised vowels（allowing for the constraints described in 2．5．4 and 2．5．5），with the frequencies that would expected based on the frequencies of the different pitch contours and oral versus nasalised vowels．Similarly，there are no correlations between the tone melody associated with a word and the appearance of nasalisation on any of the vowels in that word．

## 2．5．7 Consonant clusters and unusual onsets

In 2.1 we described the syllable structure of Skou as not allowing complex onsets．This is almost true－no lexical items must be unambiguously specified as having consonant clusters． Nonetheless there are some cases of syllables with complex onsets involving consonant clusters in the language．

The first of these involves the inflection of the verb oeng li＇remember＇．There is a regular inflection，and also an alternative inflectional paradigm which involves the cluster $p l$ for 3SG．F； both of these are shown in（66）and（67）below．

Regular paradigm

| ¢ | आ通 | k F | 9 | 䫆 | 自 | $\varepsilon$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1SG | 2SG | 3SG．NF | 3SG．F | 1PL | 2PL | 3PL |
| Alternative paradigm |  |  |  |  |  |  |
|  | आ的 | 光 | $\mathrm{pl}^{3}$ | ， |  |  |
| 1SG | 2SG | 3SG．NF | 3SG．F | 1PL | 2P | 3P |

The second recorded instance of a consonant cluster involves the lexical item lópa＇earlier on＇，which has occasionally be recorded as［blopa］，in addition to the more frequent and universally accepted［bpa］．This accretion of a［b］is not random：the only cluster recorded for this word is $[\mathrm{bl}]$ ，and never $[\mathrm{Fl}],[\mathrm{tl}]$ ，$[\mathrm{kl}]$ ，［ fl$]$ ，the other possible clusters in proto－Skou．The pronunciation with an initial cluster might reflect an archaic form of the word，a relic from an earlier stage of the language（we lack any attested cognates of this word in related languages， however，so this idea must remain speculative）．The presence of a［ pl$]$ as an option for the 3SG．F inflection of＇remember＇is strongly suggestive of an inflectional form that would have been regular in a cluster－permitting stage of the language，and this form has been sporadically retained into the contemporary language，albeit only for some older speakers．This view，the idea that there are some archaic remainders in the language that have been by－passed by the regular sound changes that define the language，is supported by the occasional record of $\mathbf{T} /$ pronounced as $\left[\mathrm{k}^{\mathrm{w}}\right]$ ，reflecting quite directly the proto－Skou phoneme $* \mathrm{k}^{\mathrm{w}}$ from which many modern Skou $/ \mathbf{T} / \mathrm{s}$ are derived（Donohue 2002）．See also 1.7 for discussion on the possibly very recent loss of clusters in Skou．

## 2．6 Reduplication

Reduplication can apply to words from any of the open word classes，and it has a variety of semantic and syntactic functions depending on the word class to which it applies，despite the
invariant phonological form it takes. As such it cannot easily be described simply as a morphological process later in the book, and so it is described here in the chapter on phonology.

Reduplication in Skou involves the copying of one syllable, in both its segmental and suprasegmental features, and placing that copy next to the original. With polysyllabic words, reduplication is occasionally complete: that is, while the more common pattern is for just the final syllable to reduplicate, there are occasional instances of both syllables reduplicating. For instance, in the same sentential slot that requires reduplication in (68), we find the form shown in (69) for a disyllabic verb root (see 7.9 for discussion of the marking of aspect and mood in Skou). Reduplication of the first syllable, shown in (70)a, is ungrammatical; reduplication of both syllables of the disyllabic word is proscribed against, but is occasionally heard.
a. $K e=t i$.
3SG.NF=3SG.NF.go
'He went.'
b. $K e=t i-t i \quad l i$.
3SG.NF=3SG.NF.go-RED do
'He wants to go.'
a. Ke=jíngpa.
b. Ke=jíngpa-pa li.
3SG.NF=fly
3SG.NF=fly-RED do
'He (a bird) flew.'
'He wants to fly.'
a. * ke jíng jíngpa li
b. ?* ke jíngpa jíngpa li

In sentences with verbal collocations (see 7.8), even though both elements present evidence of being (at least diachronically) independently inflecting verbs, only the last syllable shows reduplication. The following examples, using há hi 'count', show that the first syllable cannot be reduplicated.
a. Ya $k e=k-a ́ k-i$.
thing 3SG.NF=3SG.NF-count 3SG.NF-count
'He counted (the things).'
b. Ya $k e=k-a ́ k-i-k i \quad l i$.
thing 3SG.NF=3SG.NF-count 3SG.NF-count-RED do
'He wants to count (the things).'
(72) * ya ke ká ká ki li, * ya ke ká ki ká ki li

Adjunct nominal constructions present no special complications for the reduplication template: the last syllable of the inflecting verb is reduplicated, regardless of the presence or position of the adjunct nominal with respect to the verb and its inflections. This is one test for the status of postverbal adjunct nominals (as opposed to disyllabic verbs, described in chapter 14). Examples of predicates with adjunct nominals, in which the verb but not the nominal shows reduplication, can be seen in (73) and (74).

Preverbal adjunct nominal

$$
\begin{array}{ll}
\text { a. } \begin{array}{ll}
\text { Te }=b a ̀ & n e=n a ̀ ~ \\
\text { 3 -i-ni } & \\
\text { 3PL=person } & \text { 1PL=hatred 1PL-hate-RED } \\
\text { 'We will hate them.' }
\end{array}  \tag{73}\\
& \\
\text { b. }{ }^{*} \text { te=bà } & n e=n a ̀-n a ̀ ~ n-i . \\
\text { 3PL=person } & \text { 1PL=hatred-RED 1PL-hate }
\end{array}
$$

Postverbal adjunct nominal
a. $T e=b a ̀ \quad t e=j$-á-já ráue. 3PL=person 3PL=3PL-stand-RED laughter
'They will laugh.'
b. * te=bà te=j-á ráue-ue

3 PL=person 3 PL=3PL-stand laughter-RED
c. * te=bà te=j-á rá-ráue

3PL=person 3PL=3PL-stand laughter-RED
Reduplication is not so commonly found with adjectives or nouns as it is with verbs, where it is part of the inflectional paradigm for tense/aspect. Reduplicated nouns have a plural or distributed sense, which can be seen as similar to the irrealis sense that is applied to verbs when they are reduplicated in that the event is in that case distributed over time. Adjectives, when reduplicated, show a different pattern. For them reduplication often has an intensifying function, though it is also attested with a sense of reducing the intensity of the adjective.

In the following examples we can see different nominals reduplicated with plural meanings. The first examples explains the fate of women whose husbands have died since the ecological destruction brought about by Indonesian colonisation has reduced the natural resources that used to be found in the Skou area. The second example describes the social situation in the Humboldt Bay region before the Dutch era.

## Nouns

$$
\begin{align*}
& \ldots \text { ne=bàro-ro, }  \tag{75}\\
& \quad \text { 1PL=widow-RED } \\
& \text { 'and us widows, } . . . \\
& \ldots \text { pìng-pìng nawò te=ti. }  \tag{76}\\
& \text { war-RED many 3PL=3PL. } \\
& \text { 'they fought many wars.' }
\end{align*}
$$

In the next two examples the use of reduplication has a distributed sense: not simply 'outside' or 'sago processing place', but a variety of possible locations which can be described by these labels. In the first example below the reduplication serves to indicate that, wherever you are, if it is outside a house a ke bàti 'evil spirit' will be able to assault you. In the second example the reduplication indicates that there is no one single action that prepares a processing site, but rather a series of actions starting with the separation and trimming of the parts of the sago tree that are used to make the upper and lower troughs, the sharpening and placing of support sticks into the ground, placing the equipment together and aligning all the parts correctly, fitting the strainer, and finally transporting the sago pith and water required to wash the starch out of the wood pith.

$$
\begin{array}{llll}
m \grave{e}=b \grave{a} & \text { moeng } & \text { pe-pe } & u n g=p a,  \tag{77}\\
2 \mathrm{SG}=\text { person } & \text { sit } & \text { outside-RED } & \text { now=INSTR }
\end{array}
$$

'you'll be sitting down somewhere outside, ...'

| Pe=ueme | pe | hòe | $n a ̀-n a$ | $p e=t u e$, |
| :--- | :--- | :--- | :--- | :--- |
| 3SG.F=woman | 3SG.F.ERG | sago | processing.place-RED | 3SG.F=3SG.F.do | 'The woman prepares the place for processing the sago, ...'

Reduplication of adjectives typically shows intensification. Reduplication has only been encountered with adjectives when they are in a predicative function, never when the adjective is used attributively or referentially.

## Adjectives

$$
\begin{array}{lll}
\ldots \text { te }=r-e & \text { mong } & \text { t' }=\text { ing } a=k o  \tag{79}\\
\text { rong-rong }=p a, \ldots . \\
\text { 3PL=3PL-get.PL } & \text { F.sit } & \text { salty.water=the=OBV } \\
\text { 'they leave it in the salty water for a long time,...' }
\end{array}
$$

$$
\begin{equation*}
\text { Rá è =ko líhi=ing, péng-péng }=p a \text {. } \tag{80}
\end{equation*}
$$

fire burn $=O B V$ garden=DEIC clean-RED=INSTR
'The fire burns in the garden, clears (it) out.'
This following example shows reduplication in a function that is indeterminate between a version of the distributive function seen with some nouns, and perhaps a function of lowering the intensity of the adjective.

```
ne=wi tàfi te, =ko, ya-na ùe-ùe=pa,
1PL=leave 3SG.F.go =OBV thing-or old-RED=INSTR
'we leave it, and, later, when they've more or less all ripened, ...'
```

There are further examples of reduplication that do not fit the analysis given above. Consider the following example of nominal reduplication, which does not involve 'plurality' or 'distributedness', but rather seems to intensify the meaning of ráng 'sun, day', indicating the noontime, rather than simply any daytime: the most intense, or most prototypical part of ráng. In this intensification the function is more similar to that found with adjectives.

$$
\begin{gather*}
\text {... te ke=inga ráng-ráng te=ing a, }  \tag{82}\\
\text { 3PL } 3 \text { SG.NF=the sun-RED 3PL=the } \\
\text { 'and over there, in the middle of the day, ... }
\end{gather*}
$$

There are additionally some few instances in the language corpus of reduplication applying to minor syntactic categories. These include reduplication of the negator, the aspectual marker loeng, and one instance of a numeral being reduplicated. The reduplicated numeral takes the same distributive function that is found with reduplicated nouns and, possibly, adjectives. Another clearly distributive use is found in the reduplication of nè 'where', which can be reduplicated to give a 'wherever' meaning.

Intensification: negator, aspect reduplicated
Táng=ing te=ti=ko=ra, ka-ka=pa.
k.o.net=the $\quad 3 \mathrm{PL}=3 \mathrm{PL} . \mathrm{do}=\mathrm{OBV}=$ also $\quad$ NEG-RED=INSTR
'They used to make the táng nets, but no more.'
(84) $N e=w a ́$ loeng-loeng $=p a$,
$1 \mathrm{PL}=$ plant finish-RED=INSTR
'we plant them all, ...'
Distributive: numeral, epistememe reduplicated ${ }^{28}$

```
ne=wí ta fi í, bàng héngtong-tong=pa,
1PL=leave stand yesterday three-RED=INSTR
'we leave it stand for, oh, three days, ...'
```

[^16]```
\(K e=k-a ́ \quad h a n g b a n g=k o \quad k e=k-a ́\)
3SG.NF=3SG.NF-walk far=OBV 3SG.NF=3SG.NF-walk
    \(n e ̀-n e=k o \quad k e=t o e\) ?
    where-RED=OBV 3SG.NF=3.come
    'He came from where is it, where he came from?'
```

It should be clear that the exemplification of reduplication and its functions on other word classes has, thus far, been sketchy at best (apart from the description of the role of reduplication in the marking of tense/aspect on verbs). This lack has its roots in a real phenomenon, and does not simply represent a gap in the elicited data: most Skou people not willing to acknowledge the non-inflectional uses of reduplication. While eliciting paradigms with reduplication in the verbal domain is unproblematic, it is impossible to even get speakers to acknowledge their use of reduplication on negators or aspect marking (this has consequences for the sketchy analysis of reduplicated auxiliary verbs, seen in 7.9), and speaker acceptance of reduplicated nouns is at best tentative, and usually involves speakers describing an instance of reduplication in a recording as a 'speech error', or that the tape was damaged. Certainly I have never met a Skou speaker who could respond to questions about the differences between plain and reduplicated forms of nouns or adjectives. For that reason I can only report some speculations on the function and meaning of reduplication on non-verbs, but not investigate it fully.

### 2.7 Orthography

The following sections describe the orthographic representation of the segments and suprasegments of Skou. Most of these conventions have already been seen in use in the previous sections and in chapter 1, but have appeared without formal explanation, which has been reserved until after the exposition of the phonology. In the following account I shall present the conventions used for segments first, and then discuss the representation of tone and nasalisation.

### 2.7.1 Segmental orthography

The consonants are shown simply with graphemes that most closely represent their IPA norms, the one exception being that $\{y\}$ is used for the phoneme with a palatal glide allophone, in accordance with Indonesian orthographic norms. There is some support for the grapheme $\{\mathrm{j}\}$ to be used for this phoneme amongst younger speakers, but these are the ones who are collapsing the distinction between the glide and the stop. In order to give the best record of the most conservative variety of the language, the distinction between the glide and the stop has been maintained here. Finally the non-back rounded vowels are represented by digraphs with $e$ used to indicate relative frontness, and the vowel symbol with the appropriate height chosen from the normal inventory of back rounded vowels.

The more peripheral vowels are shown with the graphemes most closely corresponding to their IPA norms. The non-back rounded vowels are shown with digraphs, which initially attracted opposition from speakers, because they have no correspondence in Indonesian or Tok Pisin, the only written languages available to any Skou speakers. The low frequency of these sounds in Skou means that this is not too much of a visual problem, but remains a point of contention. I shall discuss this and other socio-orthographic issues in 2.7.3.

The graphemes used to represent segments, and their phonological correspondences, are shown in table 73.

Table 73. Phoneme: grapheme correspondences

| Phoneme | Grapheme | Phoneme | Grapheme |
| :---: | :---: | :---: | :---: |
| $\underline{\square}$ | $p$ | 1 | $l$ |
| $t$ | $t$ | m | $m$ |
| k | $k$ | n | $n$ |
| $b$ | $b$ | i | $i$ |
| I $\sim$ | $j$ | $\varepsilon$ | $e$ |
| f | $f$ | 6 | $a$ |
| ${ }_{1}$ | $h$ | $\square$ | $o$ |
| W | $w$ | 1 | $u$ |
| j $\sim 15$ | $y$ | $\#$ | ue |
| I | $r$ | 0 | oe |

There are very few word-internal sequences of adjacent syllables with no onset on the second syllable; less than one sixth of syllables lack a consonantal onset, and less than half of all words are two or more syllables in length. This results in maximally $8 \%$ of words showing VV sequences. As a result of this the number of VV sequences in the language, particularly the number of $a \mathfrak{c i c}$ or sequences, is very small. To differentiate these when they do occur, a dot or hyphen has been used to separate the syllables, as in lo.e / lo-e 'north, deep sea' and tàru.e /
 any other two vowels, such as [ai] in 'father', is not marked with a dot or hyphen, as there is no potential ambiguity: álu, not *á.ì or *á-i.

### 2.7.2 Tone and nasalisation

Nasalisation is marked in the orthography with the grapheme $\{-\mathrm{ng}\}$ in the coda position of the appropriate syllable. This was universally accepted by speakers, probably reflecting a familiarity with this convention from the pronunciation that many Skou people give to Indonesian words with final -it, such as Indonesian $P$, Skou as [pasã] ~ [pasay]. Older speakers pronounce all final nasals in Indonesian as nasalisation on the vowel: Indonesian malam \{malam\} 'night', pronounced in Skou as [malli],
 Younger speakers do not have this pronunciation habit, since they have received enough schooling in (standard) Indonesian to have acquired its phonology more thoroughly.

The pitch values for the syllables of a word are indicated by showing the pitch of each syllable by diacritic: a high pitch is shown with an acute accent ', low pitch with no marking, and falling pitch is marked with a grave accent `. When the rime of the syllable is represented with a digraph, the diacritic for high or falling pitch appears on the first element of this digraph. For example, óe 'yam' with a single diacritic represents [匹] [|-], and not *oé or *óé, which, logically, would represent different disyllabic words, [oc] [|--] and [oe] [|-], respectively; these are not attested words in Skou. In words of more than one syllable the pitch of each syllable is marked, even though this is not strictly necessary. For instance, on a three-syllable word such as patitit 'freckle', which has a LH tone melody, simply indicating the first and final
syllables as displaying low pitch and high pitch would be sufficient to differentiate this LH tone melody from all others: \#patití. This practise has not be followed, as it would involve more rules for marking and not marking that would need to be learned, while adding nothing to the ability of the system to adequately represent the underlying contrasts. The current system, while over-differentiating to some degree, is representationally adequate, and does not involve any non-phonetic principles or complicated rules for marking or not marking audible pitch heights. Where a compound combines elements that undergo tone deletion, the original lexical pitches, not the spread compound pitch, is marked on each member of the compound. Similarly, the use of a low tone to mark past tense on verbs is not shown in the orthography. The practical effects of these orthographic choices are shown in table 74.

Table 74. Graphemes used for tone and nasalisation: a selection

|  | Segments | Pitch | Nasalisation | Orthography |
| :---: | :---: | :---: | :---: | :---: |
| 'sleepy' | fa. | [ ${ }^{-}$ | $\emptyset$ | fá |
| 'bad' | fe | [ ] | N | fèng |
| 'far' | haี่เส่ | [--] | N, N | hángbáng |
| 'valley' | h陾 | [ $]$ | N | hóeng |
| 'green tree frog' | 174 | [- -] | N $\varnothing$ | kíngue |
| 'heel | 13ito | [--_] < F-HL | N Ø Ø | làngíto |
| 'peanut' | 184 | [ $\$-] & Ø Ø & lèue  \hline 'west' & 13w 5 & [- ${ }^{-}$] | $\emptyset \mathrm{N}$ | lowóng |
| 'I' | ni | [ $]$ | $\emptyset$ | nì |
| 'straight' | tulolem | [- ${ }^{--}$] | Ø Ø Ø | tuelóelóe |

The writing of tone by using one of the otherwise unutilised letters of the alphabet in the otherwise unoccupied coda position was mooted with some speakers. The fact that $c d q v x$ and $z$ are all free ( $g$ appears in the nasalisation digraph $-n g$ ), and that no words end in codas, would make this an attractive choice (mirroring some Hmong orthographies that use roman script). When presented with the possibility of orthographically distinguishing [tia] [-] 'hair' from [ta] [ ${ }^{-}$] 'arrow' by writing the first as $t a$ and the second as (for example) tac, taq, or tax, or vice versa, the response I received was that, yes, you could write it that way, but that it would (of course) be wrong. It was thought that any of these letters might indicate the pitch (a concept that was treated rather dubiously), but they would still result in the words having to be pronounced [ $\mathrm{tat}[ \}]$, [ tak$]$ and [ tak k$]$ : familiarity with Indonesian orthography, in the case of $\{\mathrm{c}\}$, awareness of the use of $\{q\}$ in the Koran, and reports of $\{x\}$ from Papua New Guinea, provided consonantal associations which were too strong to be shaken off for the purposes of tone marking. In Indonesian it represents [ $\mathrm{t} \cdot \mathrm{T}^{\circ}$, and it has been used for this purpose in, for instance, the word kúci 'marbles' [of unknown provenance]; the $\{\mathrm{q}\}$ in the Koran is a voiceless uvular stop, but is usually pronounced as a simple $[\mathrm{k}]$ in Indonesian; and $\{\mathrm{x}\}$ in Papua New Guinea, when used, is pronounced as [ks].

In compounds, in which the tone of the final element prevails over the whole compound, where it is a marked tone (see 2.3.1.8), the tone of the compound as a whole is written, not that of the individual morphemes that make up the compound. This regretfully obscured the underlying forms, but does have the advantage of representing the sounds that are heard more accurately. It remains to be seen whether this is the more or less desirable way to deal with tonal changes in the language. An occasionally-used native orthography already used a diacritic to
mark (amongst others) tonal distinctions, so the notion of diacritics was not too foreign. This pre-existing orthography is described in the following section, where it is compared to the orthography used here from a linguist's representational and a speaker's learning point of view.

### 2.7.3 Resolving conflicts in the orthography

In 2.7.1 we discussed the fact that the use of the digraphs oe and $u e$ has encountered some resistance amongst some Skou speakers, especially the more formally educated people who had experimented with an orthography for the language themselves, which did not employ digraphs for the non-back rounded vowels. The received wisdom on the subject of a Skou orthography was that it was no problem to write the language, but that there was no point in doing so, since neither you nor anyone else could then read what you had written. This apparent paradox has its roots in the representation for the non-back rounded vowels, and suprasegmentals.

Allowing for the fact that $\bar{\psi}$ does not occur (2.3.2.1), the following syllable rimes are differentiated in Skou:

Table 75. Skou rimes


| Falling pitch |  |  |
| :---: | :---: | :---: |
| i | $\#$ | $u$ |
| $\varepsilon$ | $\square$ | $a$ |
|  | $a$ |  |
|  |  | $a$ |

Nasal

| İ |  | (i. |
| :---: | :---: | :---: |
| $\varepsilon$ | 0 | 3 |
|  | a |  |




The locally-developed orthography represents these different rimes in the following way:
Table 76. Local orthographic representation of Skou rimes

|  | High pitch |  |  |
| :---: | :---: | :---: | :---: |
| Oral | $i$ | $\hat{e}$ | $u$ |
|  | $e$ | $\hat{e}$ | $o$ |
|  |  | $a$ |  |




While the grapheme $\hat{e}$ is used a lot, it is equally clear that its use is not random. It serves several distinct and easily defined functions. This letter+diacritic $\hat{e}$ is used:

- to mark the non-back rounded vowels in all environments;
- to mark the falling tone in all environments; and
- to mark nasalisation on a non-low, non-high vowel.

While consistent, and certainly not hard to learn, this orthography does suffer from the fact that, of the 39 contrasting rimes in Skou, 23 of them are represented by the same grapheme $\hat{e}$. this led, as mentioned above, to a writing system that is easy to learn, but pointless to apply: you can write things down with no difficulty, but noone can then read your composition. An example of this can be seen in the very plausible sentence below:
(87) Written: <Hê pe tê> for Hòe pe=tue.
sago 3SG.F=3SG.F.do
'She cooked sago.'
Possible lexically instantiated interpretations for orthographic <hê>:
hang 'coconut', héng 'ask', héng 'yawn', hèng 'fart', hèng 'accusation', hì 'blood', híng 'other, different', hò 'roofing', hò 'whistle', hóe 'go beachwards', hòe 'sago', hóeng 'valley', hóeng 'wait', hù 'hammer', hung 'edge', hùng 'vagina', hue 'squash, crush', húe 'stomach'.

Possible lexically instantiated interpretations for <pe>:
pe '3SG.F', pé 'put down'.
Possible lexically instantiated interpretations for <tê>:
tà 'arrow', tàng 'sickle', tè 'garden fence', tue 'she does'.
Possible plausible interpretations for <hê pe tê>:

> a. Héng pe=tue.
> yawn 3SG.F=3SG.F.do
> 'She yawned.'
> c. Hì pe=tue.
> blood 3SG.F=3SG.F.do
> 'She bled/menstruated.'
e. Hò $p e=t u e$.
roofing 3SG.F=3SG.F.do
'She make a roof.'
g. Hòe pe=tue.
sago 3SG.F=3SG.F.do
'She cooked sago.'
i. ? Hùng pe=tue.
vagina 3 SG.F=3SG.F.do
'She had sex with a woman.'
b. Hèng pe=tue.
accuse 3SG.F=3SG.F.do
'She accused.'
d. Hìng $p e=t u e$.
other 3SG.F=3SG.F.do
'She did something else.'
f. Hò pe=tue.
whistle 3SG.F=3SG.F.do
'She whistled.'
h. Hù pe=tue.
hammer 3SG.F=3SG.F.do
'She hammered.'
j. Hùe pe=tue.
stomach 3SG.F=3SG.F.do 'She considered.'
(Example (88)i is clearly odd, but was deemed plausible for a story about spirits who can change their sex)

Compare this existent, but dysfunctional, system with the $100 \%$ of phonologically distinct forms that is found in the current proposed orthography, shown in table 76. While it is $100 \%$ representative of all the contrasts, the orthography used here is inferior to the local one in some respects. The digraph representations oe and $u e$ are not intuitive, although they are decipherable even for speakers who have received no orthographic instruction. The use of oeng, four letters, to represent a single vocalic rime is a lot to ask of a newly literate speaker, especially when the speaker is then required to apply a tone mark as well.

Table 77. Current orthographic representation of Skou rimes (aligned to match the previous two tables)

| Oral | High pitch |  |  |
| :---: | :---: | :---: | :---: |
|  | $i$ | úe | ú |
|  | é | óe | ó |
|  |  | á |  |


| Low pitch |  |  |
| :---: | :---: | :---: |
| $i$ | $u e$ | $u$ |
| $e$ | $o e$ | $o$ |
|  | $a$ |  |


| Falling pitch |  |  |
| :---: | :---: | :---: |
| $\grave{l}$ | $\grave{u} e$ | $\grave{u}$ |
| $\grave{e}$ | $\grave{o} e$ | $\grave{o}$ |
|  | $\grave{a}$ |  |


| Nasal | ing |  | úng | ing |  | ung | ing |  | ùng |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | éng | óeng | óng | eng | oeng | ong | èng | òeng | òng |
|  |  | áng |  |  | ang |  |  | àng |  |

Another problem with the current orthography is that vowel alternations in verbs are harder to represent. An alternation of any sort in a verb with falling tone needs no orthographic manipulation in the local orthography: the common alternation of $a$ to $\dot{a}$ in feminine verbs requires no change in the appearance of the written verb in terms of its rime: the written $\hat{e}$ remains $\hat{e}$. Given that the information about the gender of the arguments will be present in the form of, minimally, proclitic pronouns, the marking of agreement by vowel change is redundant, and so its overt marking is not necessary for reading (or listening) comprehension. In the current system we would need to mark $o e$ and $u e$ in the different forms of the verb (see 7.2.3 for details).

Yet another issue in the orthography is the representation of the palatal consonants, here given as $j$ for $\not \subset /$ and $y$ for $\not \mathfrak{j} /$. Since in the speech of younger people these two phonemes tend to collapse, there is an understandable tendency to collapse them (as $j$ ) if writing. While the differentiated spelling employed here has been judged acceptable, it is not intuitive for most people. This is a difference that is unlikely to survive in any fluently written Skou, since most younger people want to write both phonemes with a $j$ (probably reflecting the fact that, for younger speakers, the two are collapsing to one phoneme), allowing the $y$ only as a concession to the authority of the older Skou speakers.

The orthography, if any, which ultimately gains widespread acceptance in the Skou villages will be the one that is a product of locally-defined useability, not necessarily a linguist's notion of phonological accuracy, and so will probably be a compromise between the archivally fully representative form used here, and the functional system that was developed earlier. We can only wait and see. (See San Roque (2001) for a detailed study of the marking of tone in the orthographies of two languages related to Skou.)

### 2.8 A note on difficulties faced in identifying tonal systems

Identifying the Skou tonal system as a word-based one, rather than a syllable-based one, is clearly the best analysis for the data, and preliminary work on other languages related to Skou indicates that these languages, too, have word-tone systems. The analysis has not, however, been unproblematic, and deserves comment in the light of the previous classification of Skou as a model example of a syllable-tone language of New Guinea (Donohue 1997: 354), the description of Skou tonal contrasts in Voorhoeve (1971), and Ross' similar description of tonal patterns in the closely related language of Vanimo (Ross 1980).

The methodology employed in Donohue (1997) was to examine not just the pitch contrasts that occur in the language, but also the contrasts in patterns of pitch. For example, given a contrast between H and L on monosyllables, we can say almost nothing about the tone system of the language, other than that there is use of pitch to lexically differentiate words (which, it might be parenthetically noted, is not a requirement of a phonological system that is justifiably called 'tonal'). The appearance of two monosyllabic words in a language with a contrastive H and $L$ could be interpreted as:

1 the appearance of two separate syllable level tones in the language, H and L , which show just this contrast in pitch;
2 the appearance of two separate word-level tone melodies in the language, H and L, which show this contrast on monosyllables, and an identical contrast on polysyllables;
3. the appearance of a pitch-accent system in the language, in which the pitch accent is distinguished by a higher pitch than the other syllables in a word.
To show the argument in extremis, each of the above hypotheses, if applied without any variation from these ideals would yield very different predictions for the analysis of tonal behaviour in trisyllabic words. These predictions can be plotted as shown in table 78, which assumes that none of the potentially complicating factors for each type of system, such as tone sandhi and tonal restrictions that prevent certain logically possible combinations from appearing (Donohue 1997), are present, and that only the two level pitches, High and Low, contrast.

Table 78. Predictions for trisyllabic words based on a H-L distinction in monosyllables

|  |  | Monosyllables |
| :--- | :--- | :--- |
| Syllable tone | $\mathrm{H} v s \mathrm{~L}$ | Trisyllables |
|  |  | HHH HHL HLH HLL |
| Word tone | $\mathrm{H} v s \mathrm{~L}$ | LHH LHL LLH LLL |
| Pitch accent | $\mathrm{H} v s \mathrm{~L}$ | HHH LLL |

Clearly the trisyllabic predictions are vastly different, and the true nature of the tone system is easy to spot, although it was totally masked when we examined just monosyllables.

The complicating factors, such as tone sandhi, minimal word constraints, and variable inflection points, mask these differences, though it was thought that determining the scope of tonal association was still simply a matter of perseverance. This is indeed, so, though the example of examining tone in Skou has shown that the right tone sandhi can make a word tone system appear remarkably similar to a syllable tone system. Even when examining disyllabic words, where the total number of expected contrasts with three tones would exceed the trisyllable example above, the system is still adequately described as a syllable-tone system. Despite this, it is quite clear, when trisyllabic expressions are taken into account, that the language has a word-tone system, with five contrastive tone melodies. This might seem an unnecessary complication, but the fact that a word-tone system is just the same domain for tone association as is observed in other languages of the Macro-Skou family to the east, such as Barupu (Crowther 2000), and that five tones (or, in some varieties, six) are the number of pitch contrasts found on monosyllables in both the Piore River languages (which include Barupu) and the Serra Hills languages which lie in between the Piore River and the Skou languages, adds further support to the reanalysis of the tonal system.

### 2.9 Summary of phonetics and phonology

In this chapter we have outlined the major aspects of the Skou phonological system from a synchronic perspective, with occasional diachronic explanation where that has been deemed useful in understanding the synchronic idiosyncracies. At all levels there are some peculiarities: segmentally, the language is unusual (for the area, and for its family) in having two non-back rounded vowels, and lacking a fricative $/ 3 /$, while having two other fricatives in the system. The language's use of tone and nasalisation is not so unusual for a language from New Guinea, but the complex interaction of segmental and suprasegmental constraints, resulting in a very reduced set of possible syllables in the language, makes for some interesting implications for the structure of these suprasegmental elements in a phonological representation. The behaviour of tone with respect to certain consonant types can be explained in terms of articulatoryphonetic gestures, but some of the constraints on nasalisation and vowel types (for instance, the ban on *[í] in Skou - see 2.5.5) can only be resolved by appealing to the historical phonology of the language (Donohue 2002b), as there are no well-motivated synchronic reasons for the observed patterns. The extremely restricted range of allowed syllable types in Skou is unusual for a language with such a rich inventory of vowels, an at least average number of consonants, and a rich range of suprasegmental processes, and it is surprising that the lexicon is still so largely monosyllabic. One feature of the language that is possibly a response to these phonological restrictions is the extensive use of 'specifiers' to denote the generic category to which a noun belongs (see 2.3.1.3), and historically as class agreement markers with adjectives in some functions (see 10.6 and 10.7).

## 3 Grammar outline

As discussed in the introduction (especially sections 1.5 and 1.8), many features of Skou are not typical of what is generally thought to be a 'typical' Papuan language. ${ }^{29}$ On the other hand, there are many areal traits of the New Guinea region that are instantiated in Skou, and these, along with some of the exceptions, will be briefly mentioned in this chapter. This chapter is intended as a 'road map' of the contents of the rest of the book. It provides directions to where more details on a given topic may be found, and, along with 1.5 , it serves as a typological 'pit stop', in the sense that a more complete inventory of the more salient and cross-linguistically comparable typological features that are not found in Skou is presented here than in the rest of the book. Elsewhere the emphasis is describing the structures that the language does possess.

### 3.1 Word Order

Skou displays a basic SOV word order, typical of many Papuan languages. Examples of this can be seen in the examples (1), (3) and (5). The first sentence shows the normal order with subject preceding object, and the clause ending in a verb (the justification for the labels 'subject' and 'object' is given at the end of this chapter). The ungrammaticality of these nominals appearing in the reverse order is shown in (2). (Topicalisation can change the apparent word order in sentences, though the word order inside the clause is still intact. See 3.1.1, and chapter 4 , for more discussion of this construction, and Donohue 2005 for discussion of the construction in an areal perspective.) The appropriate sentences with the participants reversed in terms of syntactic roles are shown in (3) and (4). ${ }^{30}$

$$
\begin{align*}
& \text { [A Áì] [р yá-né-nì=ne] ke=yú-yú. }  \tag{1}\\
& \text { father sister-1SG.DAT-1SG.GEN=1SG.DAT 3SG.NF=search-RED } \\
& \text { 'Father is looking for my sister.' } \\
& \text { * [p yá ne nì ne] [A ấ] ke yú-yú } \\
& \text { [A Yá-né-nì=ne] [A ầ] pe=yú-yú. } \\
& \text { sister-1SG.DAT-1SG.GEN=1SG.DAT father 3SG.F=search-RED } \\
& \text { 'My sister is looking for father.' }
\end{align*}
$$

[^17](4) * [р ái] [A yá né nì ne] pe yúyú

Oblique arguments generally appear following the verb, except time expressions, which are most unmarked in a clause-initial position (though they can sometimes, for pragmatic effect, be found postverbally - see 4.5).

$$
\begin{array}{llc}
\text { [s } R e-k e ́=k e] & k e=t i & \text { [obl Jáwung]. } \\
\text { father-3SG.NF.GEN=3SG.NF.DAT } & \text { 3SG.NF=3SG.NF.go } & \text { Nyao }  \tag{6}\\
\text { 'His father went to Nyao.' } & &
\end{array}
$$


'She made sago for us.'
(7) Bàng [phòe] pe=tue.
yesterday sago 3SG.F=3SG.F.do
'She made sago yesterday.'
The only major exception to this principle of obliques occurring postverbally (in nonnegative clauses - see chapter 16) concerns the placement of an instrumental NP. Nominals functioning as instruments, perhaps licensed by virtue of having overt case marking, may occur preverbally as well as postverbally.

| Pe | tangnófó=pa | móe | $p e=r-u_{L}$. |
| :---: | :---: | :---: | :---: |
| 3SG.F | knife=INSTR | fish | 3SG.F=3SG.F-cut.F |
| She | the fish with | a kni |  |

Case marking on instruments and other arguments of the verb is described in 3.2, while the syntax of instrumental roles is discussed in more detail in 11.8. The verbal auxiliary is another postverbal element (see 3.3), as is negation, both of which are exemplified in the following sentence. Here the postverbal $k a$ marks negation, and the auxiliary $l i$ 'do', in combination with reduplication on the verb, marks intention.
(9) Húhúfa ke=moeng-moeng ka li. slow 3SG.NF=sit-RED NEG do 'He doesn't want to sit quietly.'

The other exception to postverbal position of obliques potentially affects all the elements in a clause, and involves topicalisation.

### 3.1.1 Topicalisation and word order

When a speaker wishes to highlight a particular section of a clause for pragmatic reasons, then it is possible, and indeed usual, for that element to appear sentence-initially (in addition to a rich variety of pragmatic force markers - see 4.7. The conditions on topicalisation, which involve both pragmatic prominence and the given-ness of information, are also discussed in chapter 4). There is no disruption to the order of the other elements of the clause, but the topic element is usually found bearing a pragmatic marker, typically the deictic =ing, but acceptable with many of the other markers. In addition, an intonation break is normal between the topic and the clause. Compare (1) and the ungrammatical (2) with the fully acceptable (10).
(10) [тор [р Yá-né-nì=ne=ra=ing a] ],
[A ál] $k e=y u ́-y u ́$.
sister-1SG.DAT-1SG.GEN=1SG.DAT=also=the father 3SG.NF=search-RED 'My sister, Father is looking for (her) too.'

Not only objects, but also subjects, obliques and predicates may appear in this pre-clausal position (though, of course, they do not have to). With a subject, which is typically clauseinitial in any case, we can see that it is in fact in topic position when we have some of the following morphosyntactic indicators:

- an abundance of pragmatic clitics marking its status. In (10) the topic is marked by both $=r a$ and $=i n g a$, in contrast to the other nominal of the clause which has no special marking (for a discussion of which see chapter 4);
- an intonation break separating it from the rest of the sentence (here indicated with a comma - see ‘Abbreviations and Glossing conventions’ under 'Preliminaries’, following the table of contents at the beginning of the book);
- the subject appearing before a clause-initial time expression.

In the following clause the fact that Ánì nì ne fa wò precedes bàng is evidence for it appearing in a position other than its normal clause-internal one.

$$
\begin{array}{cc}
{[\text { тор }[\mathrm{A} \text { Ánì-nì=ne=fa=wò ] ], }} & \text { bàng }  \tag{11}\\
\text { mother-1SG. GEN=1SG.DAT=only=EMPH yesterday } & \text { [P hòe }] \\
\text { sago } & \text { se=tue. } \\
\text { 'It was my mum who made sago yesterday.' }
\end{array}
$$

Obliques in topic positions can be seen in the following:

$$
\begin{array}{lll}
\text { [Top [obL Te Jáwung=fue } a=w o ̀ \text { ] ] } & \text { ne=ne-ne } & \text { ti. Te Jáwung=a }  \tag{12}\\
\text { Nyao=that=EMPH } & \text { 1PL=1PL.go-RED } & \text { 1PL.do 3PL=Nyao=PROM } \\
\text { te=bà héfèng. } & \\
\text { 3PL=person good } \\
\text { 'Nyao, we want to go there. Nyaos are good people.' }
\end{array}
$$

$$
\begin{array}{cclll}
{[\text { TOP [OBL } \text { Ke=ing=ra=wò ] ], }} & \begin{array}{c}
e=\text { moeng-moeng }
\end{array} & k a, & \text { jéng } & \text { fèng. }  \tag{13}\\
\text { 3SG.NF=DEIC=also=EMPH } & \text { 2PL=sit-RED } & \text { NEG } & \text { place } & \text { bad } \\
\text { 'You lot shouldn't sit there, it's not a good place.' } & &
\end{array}
$$

A predicate may also be fronted, even if verbal. In this case there is usually some repetition of the predicate, or the light verb $l i$ 'do', inside the clause.

$$
\begin{align*}
& \text { [TOP }[\operatorname{PRED} P e=w \text {-á=ing } a \text { ] ], rángleng=pa hòe }  \tag{14}\\
& \text { 3SG.F=3SG.F-pound=the afternoon=INSTR sago } \\
& p e=t u e \quad e \text {. } \\
& \text { 3SG.F=3SG.F.do 3SG.F.be } \\
& \text { 'She pounds it, until afternoon she works the sago.' } \\
& \text { (Literally, 'The she-pounds-(it) }{ }_{\mathrm{i}} \text {, having become afternoon she } \\
& \text { does } \mathrm{it}_{\mathrm{i}} \text { to the sago.') }
\end{align*}
$$

As mentioned earlier, further discussion of the role of pragmatic prominence in clausal and sentential syntax can be found in chapter 4 . There is not any significant variation at the phrase level as a result of pragmatic factors, however, with pragmatics determining what elements are coded where in the sentence, but not where within the VP or NP.

### 3.1.2 Word order within the $N P$

Within the NP the order follows the expected areal norm for New Guinea: despite being an SOV language, most modifiers follow the head in the NP (see Dryer 1988). Most major modifiers are shown in the non-verbal clause in (15). The first NP, pe angku nì ne bápáli fue $a$,
shows a post-nominal adjective, and an NP-final clitic demonstrative. The possessor of the head noun is shown by a set of suffix and enclitic on the noun. The pronominal clitic at the start of the phrase specifies the gender of the underspecified head noun. The second NP, pe ku lóelóng lúe ka, displays a relative clause, lóelóng lúe ka 'ears don't listen', modifying the head noun pe ku 'girl'.

$$
\begin{align*}
& \text { [NP Pe=angku-nì=ne bápáli=fue a } \quad \text { pe=ku lóe-lóng }  \tag{15}\\
& \text { 3SG.F=child-1SG.GEN=1SG.DAT big=that } \\
& \text { lúe ka. } \\
& \text { hear NEG } \\
& \text { ''That big girl of mine is a naughty one.' }
\end{align*}
$$

(Both angku and $k u$ have been glossed as 'child'. The form angku, in addition to the root $k u$ 'child' contains an additional morpheme ang 'unmarried'; this compound has almost completely replaced $k u$ when referring to human children, and in this use ang has all but lost its meaning. When referring to animals ku is more common: naké ku-pè=pe, rather than naké angku-pè=pe dog child-3SG.F=3SG.F.DAT 'the dog's puppies')

Another relative clause type, in which the head of the relative clause occurs internal to the boundaries of the relative clause, is only found when the head of the relative clause is an object in that clause. In addition to the possibility of a post-nominal relative clause, the object may also occur in its normal position in the clause. Both possibilities are shown in the following examples:
(16) [RC Bàng pumà $k e=k a ́]=i n g a \quad n e=n-a n g$. yesterday wallaby $3 \mathrm{SG} . \mathrm{NF}=$ hit=the $1 \mathrm{PL}=1 \mathrm{PL}-\mathrm{eat}$
'We ate the wallaby that he shot yesterday.'

$$
\begin{align*}
& \text { Pumà [RC bàng ke=ká ] =ing a } \quad n e=n \text {-ang. }  \tag{17}\\
& \text { wallaby yesterday 3SG.NF=hit=the 1PL=1PL-eat } \\
& \text { 'We ate the wallaby that he shot yesterday.' }
\end{align*}
$$

These different types of relative clauses are discussed in more detail in 8.3.
In contrast to the predominantly posthead syntax of NPs, manner adverbs tend to precede a main verb, more in keeping with the head-final order of verbal elements. Sentences with the adverb following the verb are at best only marginally acceptable, and are judged outright ungrammatical if there is a postverbal element, either an oblique nominal or an auxiliary.

Preverbal adverb
$T e=b a ̀=f u e ~ a \quad h a ́ h a ́ f a ~ t e=y-a ́$.
$3 \mathrm{PL}=$ person=that slowly $3 \mathrm{PL}=3 \mathrm{PL}-$ walk
'Those people walked along slowly.'
Postverbal adverb

$$
\begin{array}{ccc}
\# / * t e=b a ̀=f u e ~ a & t e=y-a ́ & \text { háháfa }  \tag{19}\\
\text { 3PL=person=that 3PL=3PL-walk } & \text { slowly } \\
\text { 'Those people walked along slowly.' }
\end{array}
$$

The following sentences, with an adverb appearing in various postverbal positions in a sentence with both a verb and aspectual auxiliaries, are unambiguously and firmly rejected by speakers.

Postverbal adverb with auxiliary verbs

| $!^{*} t e=b a ̀=f u e ~ a ~$ | $t e=y-a ́$ | háháfa | $e$ | $t i$ |
| :---: | :---: | :---: | :---: | :---: |
| $3 \mathrm{PL}=$ person=that | 3PL=3PL-walk | slowly | 3PL.be | 3PL.do |
| 'Those people are walking along slowly.' |  |  |  |  |
| ) ${ }^{*}$ te bà fue a te yá e háháfa ti |  |  |  |  |
| !* te bà fue a te yá e t | háháfa |  |  |  |

When an adverb is placed postverbally in the same clause as a postverbal oblique, similarly strong reactions of ungrammaticality are found concerning this placement.

Postverbal adverb with location nominal

> !* te=bà=fue a te=y-á háháfa bàme
> 3PL=person=that 3PL=3PL-walk slowly village
> 'Those people walked slowly in the village.'
(24) !* te bà fue a te yá bàme háháfa

For both clauses with auxiliaries and clauses with obliques, the normal preverbal placement of adverbs is grammatical, as can be seen in the fully acceptable preverbal placement of háháfa in (25) and (26).
(25) Te bà fue a háháfa te yá e ti.
'Those people are walking along slowly.'
Te bà fue a háháfa te yá bàme.
'Those people walked slowly in the village.'
Other means of marking the manner in which an event is accomplished include various verb serialisation constructions, for which see chapters 15 and 13.

### 3.2 Morphological marking

In addition to the use of word order to disambiguate the roles of participants in sentences, morphological case marking strategies and verbal agreement are also found in Skou. The examples in the preceding section have shown sentences without any case marking, except on the instrumental nominal in (8). In addition to this low-frequency case marking possibility it is also possible for a pronoun (agreeing in number and gender with the preceding nominal head) to appear at the end of the NP referring to the subject of a bivalent verb (the A), thus serving the function of an ergative case. (Chapters 6 and 8 have more details on the syntax of these 'summation pronouns'.) The fact that the ergative is marked by means of pronominal forms means that the ergative option is only possible for third person non-pronominal subjects (a similar ergative marking system, though compulsory rather than optional, is found in Yawa and Saweru - Jones 1986, Donohue 2001b).

The sentences in (27) - (29) present alternatives to the sentences shown in 3.1 , differing only in showing the possibility of ergative marking on the subjects of bivalent clauses, but not on objects, or on the subjects of monovalent clauses. This is obviously an ergative pattern.

[^18](28)

| * yá-né-nì=ne | [p a a ${ }^{\text {a }}$ | $k e]$ | pe= yúyú. |
| :---: | :---: | :---: | :---: |
| sister-1SG.DAT-1SG.GEN=1SG.DAT | father | 3SG.NF.ERG | She:searching.for |
| 'My sister is looking for father.' |  |  |  |



Other case marking is present in the form of instrumental marking, with the clitic $=p a$, and benefactive marking, which is formed by using the possessive pronominal set. Both of these are shown in the following variants of the same sentence. Notice that the possessive set $-k e ́=k e$ on âi cannot be interpreted as marking the subject as the possessor of âd, since it does not mark the correct set of pronominal features. More details on this construction can be found in 6.3.1 and 11.4 , including discussion of of cases in which the possessively marked beneficiary is additionally marked as being possessed.

| Pe | [INSTR | $n i ́=p a]$ | hòe | pe=tue |
| :---: | :---: | :---: | :---: | :---: |
| 3SG.F stirring.spoon=INSTR sago she:does |  |  |  |  |
| [BEN áì-ké=ke]. |  |  |  |  |
|  | s prepa | ing sago for father w | th a | ing spo |

(31) Pe hòe ní pa pe tue ái ké ke.
(32) Pehòe pe tue áì ké ke ní pa.

The instrumental NP appears before the verb and after the subject; the instrumental marker $=p a$ is obligatory on any instrumental NP, regardless of its position. In addition to the genitive and dative pronominal marking, the beneficiary is also marked by position, appearing following the verb. This is the typical position for oblique arguments to appear, as can be seen in the following example using a location:

| (33) | $P e \quad$ hòe pe=tue [Loc pá]. |
| :--- | :--- |
| 3SG.F sago she:does house |  |
| 'She's preparing sago in the house.' |  |

Apart from the beneficiary, the postverbal obliques, which include source, goal, and location (shown above) are not marked by any particular case, only by position. While this leaves the majority of different syntactic relations morphologically undifferentiated, verbal agreement provides the means to disambiguate.

### 3.3 Verbal agreement

In the examples in the last section we saw that the clitic on the verb has the same shape and same meaning as the free pronoun, in terms of the pronominal features specified (though for a more detailed analysis, see 6.3). Despite this, the sentence is ungrammatical without the proclitic, showing that clitics are fully grammaticalised in the role as agreement marker. The fact that it is an agreement marker, and not in fact a bound pronoun, can be judged from the following sentence (and see the more detailed discussion in 7.3.1).
(34) * pe hòe tue pá

In addition to the proclitic agreement that is obligatory on all verbs, ${ }^{31}$ additional agreement is usually found on the verb in the form of consonantal changes to the onset of the verb. The conditions for the appearance of prefixal agreement are mainly, but not solely, phonologically determined: prefixal agreement is only found on verbs with an initial $w, l, r, k$ or $h$, or a vowel ( $i, e, a, o$ and $o e$ ). On a verb that takes prefixal agreement, it is obligatory. Thus for the verb ang 'eat', both prefixal and proclitic agreement is obligatory. Further, they must agree in person, number and gender with the subject of the clause.

| Yá-né-nì=ne | $y a$ | pe=p-ang. |
| :--- | :--- | :--- |
| sister-1SG.DAT-1SG.GEN=1SG.DAT | thing | 3SG.F=3SG.NF-eat |
| 'My sister ate.' |  |  |


| Áì | $y a$ | $k e=k$-ang. |
| :--- | :--- | :--- |
| father thing | 3SG.NF=3SG.NF-eat |  |
| 'Father ate.' |  |  |

Various sentences showing that both the clitic and the prefix are required for a grammatical sentence are shown in the following ungrammatical clauses (compare with (33), which has both clitic and prefix, and is grammatical).

```
* yá ne nì ne ya pe ang
* yá ne nì ne ya pang
* yá ne nì ne ya ang
```

The ungrammaticality of either a proclitic or a prefix that codes the wrong person, number, or gender feature is shown in (40).
(40) * yá ne nì ne ya (ke) (k)ang

In these cases we can see that both the proclitic and the prefix mark the same pronominal features on the verb, doubling up on the informational coding. Some verbs do not exhibit changes in the onset of the verb, as seen with yú 'search for' and hí 'wash' above, in which case only one agreement marker is found. These, and other types of agreement marking, is discussed in detail in chapter 18. As is suggested by the forms of the prefixes in these examples, the prefixes are also derived from the pronominal stems. This is discussed in more detail in 7.2, where both an overview of the agreement system and discussion of the different conjugations is presented.

### 3.4 The grammaticalisation of pronominal forms

It will have become obvious from the previous sections that much of the bound morphology in Skou is transparently related to, and probably historically derived from, from the free pronouns:

[^19]we have seen that the markers for ergative, genitive, and dative are all derived, with little change, from the free pronouns, as are the verbal proclitics. Some of these grammaticalisations are probably recent developments in Skou, this recent development evidenced by the very transparent relationship between the various pronominal forms and the free pronouns, and the fact that in many cases the pronominal marking shows a certain degree of redundancy. Comparative studies with other, more eastern, languages related to Skou (see figure 1 in chapter 1.4) also suggests that many of the patterns we can see in Skou are peculiar to Skou itself, though there are attested in other, more distant relatives (figure 2).

Table 79. The elaboration of pronominal forms
$\left.\begin{array}{lll}\hline \hline \text { Function } & \text { Differences from free forms } & \text { Further discussion } \\ \hline \text { free pronoun } & \text { (base form) } & \text { Chapter 6 } \\ \text { ergative case marker } & \text { no change } & \text { Chapter 6, 8 } \\ \text { genitive pronoun } & \text { HL tone melody } & \text { Chapter 6 } \\ \text { dative pronoun } & \begin{array}{l}\text { L tone melody, } e \text {-vowel } \\ \text { verbal proclitic } \\ \text { verbal prefix }\end{array} & \begin{array}{l}\text { voptionally reduced (to schwa) } \\ \text { vowel lost, evidence of archaic } \\ \text { forms }\end{array}\end{array} \begin{array}{l}\text { Chapter 6 } \\ \text { Chapter 7 7 }\end{array}\right]$

The forms of most of the base pronouns can be related to proto-Skou forms reconstructable for the entire family (see Donohue 2002b), with the exception of the duals. These pronouns do not appear to be related to those found in other language groups in the Macro-Skou family, and do not have any bound forms corresponding to the free pronouns, suggesting an independent innovation for these pronouns in the languages of the smaller Skou family.

### 3.5 Serial verbs

Verb serialisation is a common feature of verbal complexes in New Guinea, and is also frequently found in Skou, though not as prominently or as pre-eminently as in other languages.

The main use of serialisation is with predicates involving motion. The following textual example shows a not atypical sequence of general motion verbs and direction of motion verbs. We can see that the English translation of 'bring (back)' is rendered into the four-verb sequence $r$-oe tu me toe 'get carry return come'. ${ }^{32}$
a. te=r-í-rí=pa te=r-oe tu me toe,
3PL=3PL-get.PL-RED=INSTR 3PL=3PL-get carry.PL 3PL.return 3.come
'they get them and they take them home, ...'
b. te=r-í hí-hí tí,

3PL=3PL-get.PL go.down-RED salty.water 'and when they put them down in the salty water, ...'
Serial verb constructions are also found with events denoting the transfer or transport of objects, such as 'getting', 'taking', 'acquiring' or 'bringing'. A typical example of these verbs in use is shown in (42).

[^20]\[

$$
\begin{align*}
& \text { Ne=r-oe na moe ne Te Jáwung=pa, }  \tag{42}\\
& \text { 1PL=1PL-get.PL or return 1PL.go Nyao=INSTR } \\
& \text { 'We got them all and then went back to Nyao, ...' }
\end{align*}
$$
\]

A more unusual example of a serial construction to denote 'getting' an action can be seen in the second example of the following pair. The first sentence is a typical bivalent construction, and the second shows the same event described in a serial construction:

> Naké=ing pe=w-á. dog=DEIC $3 \mathrm{SG} . \mathrm{F}=3 \mathrm{SG} . \mathrm{F}-\mathrm{hit}$
> 'She hit the dog.'

$$
\begin{align*}
& \text { Naké=ing pe=w-á mòng } k e=w i ́ .  \tag{44}\\
& \text { dog=DEIC 3SG.F=3SG.F-hit affect } 3 \text { SG.NF=get.F } \\
& \text { 'She hit the dog and it was hit.' }
\end{align*}
$$

Serial verb constructions also feature prominently in the marking of aspect, where serialisations with 'be', 'do', 'come' and 'go' are used to mark many distinctions. The use of the semantically underspecified 'be' and 'do' verbs is so common that they can better be termed auxiliaries.

### 3.6 Auxiliary verbs

Serialisation is most commonly attested with the 'auxiliary' pair $i$ 'be' $+l i$ 'do'. These verbs, often used as a single (though individually inflecting) collocational unit (see 7.8), follow the main verb, and must both agree for the features of the subject just as the main verb does. While following the main verb they precede a location, but follow a goal, and so cannot be said to be sentence-final. This can be seen in the following near-minimal pair.

Auxiliary verbs precede nominal: locative interpretation of postverbal nominal

$$
\begin{align*}
& \text { Ke=k-á } \quad i \quad l i \text { báng. }  \tag{45}\\
& \text { 3SG.NF=3SG.NF-walk be do beach } \\
& \text { 'He's walking on the beach.' }
\end{align*}
$$

Auxiliary verbs follow nominal: goal interpretation of postverbal nominal

| $K e=k-a ́ ~ t i$ | báng $i$ | $l i$. |
| :--- | :--- | :--- |
| 3SG.NF=3SG.NF-walk 3SG.NF.go | beach be do |  |
| 'He's walking to the beach.' |  |  |

'He's walking to the beach.'
The use of both 'be' and 'do' together in the examples above shows a continuous, noncompleted sense. The use of just $l i$ 'do' with a reduplicated verb gives a desiderative reading:
Ke $\quad$-á-ká ti
3SG.NF 3SG.NF-walk-RED
'He wants to walk to the beach.'

In addition to the uses of auxiliaries described above, we also find examples of the use of just $i$ 'be, stand' on its own with a non-reduplicated verb. This is strongly proscribed by native speakers, but is nonetheless found in most people's narrative style. It is associated with a generic and habitual meaning, in the past. The following example shows a typical example of the use of this construction.

| Lópa ping | $t e=t i$ | $e$, | hùng | $t e=t i$ |
| :---: | :---: | :---: | :---: | :---: |
| earlier war | $3 \mathrm{PL}=3 \mathrm{PL}$.do | 3PL.be | battle | 3PL=3PL.do |

More details on the use of the auxiliaries as aspect markers can be found in 7.9. The two separate position, postverbal yet pre-auxiliary and postverbal and following the auxiliary, are discussed in chapter 11.

### 3.7 Interaction

One typologically quite striking feature of Skou syntax (shared by other languages of Northcentral New Guinea) is is the fact that, in addition to a strict order applying to most of the elements in the clause, the adjunct nodes are not iterative. It is impossible, for instance, for more than one object to appear in a simply-headed clause (and hence there are no root-trivalent verbs); there cannot be two locational elements, say a source and a location, in the one clause; only one adverb may modify any one verb; and if there are two morphemes required in a clause which occupy the same structural position, then one will have to be realised in an alternative manner or a second clause, as each position can be filled only once. This restriction can be seen in the requirement that serial verb constructions or conjoined clauses must be used with many sentences expressing motion.

## Serialisation with ha 'from'

$$
\begin{array}{llll}
P e=w-a ́ & p a ́=k e ́-k e & p e=m o e & w-a \text { tà }  \tag{49}\\
\text { 3SG.F-from } & \text { house-3SG.F.GEN=3SG.F.DAT } & \text { 3SG.F=return } & \text { 3SG.F-walk.running } \\
t e & p a ́-p e ̀=p e=w o ̀=w e . ~ & \\
\text { 3SG.F.go house-3SG.F.GEN=3SG.F.DAT=EMPH=this } \\
\text { 'She ran from his house back here to her own house.' }
\end{array}
$$

Parenthetically we should note that it is extremely likely that há 'from' is etymologically related to há 'walk'. Synchronically they have different inflections, but, based on observed patterns in other languages from the New Guinea region, we can presume that historically they were one and the same verb, which has split into two as part of the process of esoterogenisation that has affected the language to such a degree.

It is not possible for the source pá ké ke to appear in the clause without this serial verb construction, regardless of the position it occupies in the clause; the following ungrammatical sentences show various (unsuccessful) attempts at encoding a source in different ways without using há 'from'.
(50) a. * pe moe watà te pá pè pe wò we pá ké ke
b. * pe moe watà te pá ké ke pá pè pe wò we
c. * pe moe watà pá ké ke te pá pè pe wò we
d. * pe moe pá ké ke watà te pá pè pe wò we
e. * pá ké ke pe moe watà te pá pè pe wò we.

The lack of trivalent verbs is similarly handled effectively by the grammar by serialising with ké 'get' (or wé 'get (feminine object), lóe 'get (plural object)', as appropriate). shown in (51) and (52).
(51) Tà ke=wé leng wówo. arrow 3SG.NF=get.F give uncle
'He gave an arrow to his uncle.'

```
móe ne=r-oe-roe=pa ne=n-a me toe-toe
fish 1PL=1PL-get.PL-RED=INSTR 1PL=1PL-walk return.PL 3.come-RED
    bàme.
    village
    '...we take the fish and bring them back to the village.'
```

More details on valency and verb types, and their effects on morphosyntactic possibilities, can be found in 5.4.

### 3.8 Noun classification

There is a primary division of the world into two morphosyntactically-monitored classes, animate and inanimate. Additionally, a gender system, feminine versus non-feminine, operates on all animate nominals, with biological sex determining the gender of some higher-animate nouns, and social and linguistic convention applying to others. Interestingly, the same markers are used to indicate the animate/inanimate distinction as are used for the feminine/non-feminine one. This is not necessarily marked on the noun or in the noun phrase, but is always present in the form of verbal agreement.

In terms of formal morphological marking there are different degrees to which a noun must be formally marked for its gender, with most nouns showing no overt marking on the nominal itself, but the gender becoming apparent only through any verbal agreement. Other nouns allow optional marking by pronominal proclitic: naké 'dog' does not usually appear with a proclitic, but $k e=n a k e ́ ~ ' m a l e ~ d o g ', ~ p e=n a k e ́ ~ ' f e m a l e ~ d o g ' ~ a n d ~ t e=n a k e ́ ~ ' d o g s ' ~ a r e ~ a l l ~ p o s s i b l e, ~ a n d ~$ attested, forms. Yet other nouns must appear with overt proclitics: pe=ueme 'woman' must appear with the proclitic: *ueme. This behaviour is described in more detail in chapter 10 , where both descriptive and analytical accounts of the classification system are given, while discussion of the morphology associated with classification can be found in chapters 5, 6 and 7 .

### 3.9 Adjunct nominals

Many predicates appear with not just an inflecting verb, but also with a nominal that can basically be thought of as semantically specifying the action denoted by the verb. This nominal is not a full NP, and does not bear the grammatical function subject, object, or oblique. Typically, such a nominal serves as an immediate-constituent 'adjunct' to the verb. In the following example ping 'bow' is used with lú 'release' to specify the meaning 'shoot'.

| Ke pále [ADJ.NOM pìng] ke=lú | hápèng. |
| :--- | :--- | :--- | :--- |
| 3SG.NF pig bow | 3SG. NF=release bush |
| 'He shot a pig in the bush.' |  |

Unlike objects, these adjunct nominals may not be separated from the verb by a casemarked instrument. In the example above the rather semantically ambiguous bivalent verb lú is further specified by the addition of the nominal ping 'bow'.

The position of the adjunct nominal is not completely predictable. In a clause such as that above we can spot a clear VP order as seen in (54) (evidence justifying this assumption will be presented in 3.13).
(54) VP $\rightarrow$ NP $_{\text {OBJ }}$ ADJ.NOM proclitic $_{\text {SUBJ }}=\mathrm{V}$

All adjunct nominals occur after a nominal object, and not before it. The position of the adjunct nominal with respect to proclitic agreement is not, however, so fixed. Compare (53) with (55), which shows the proclitic agreement preceding the adjunct nominal.
(55) Pe pílang $p e=[$ ADJ.NOM na] $r$-ùng.

3SG.F language 3SG.F= teaching 3SG.F-teach
'He taught (them) the language.'
More details on the position and status of different adjunct nominals can be found in chapter 14. We can also see, in the above examples, that the predicative verb appears with a pronoun cliticised to its front. This pronominal clitic is obligatory with all verbal clauses, as can be judged by comparing the sentences above with the following ungrammatical sentences, which are based on the grammatical sentences seen earlier.
(1)' * áì ke yá-ne-nì=ne yúyú
$(33)$ ' * pe hòe tue pá
(53)' * ke pále pìng lú hápèng

The case-marking pronoun is not found with monovalent predicates formed with an adjunct nominal, as can be seen in the following example where the subject of 'wash' in a monovalent clause cannot be grammatically followed by a pronoun (the adjunct nominal pa 'water' does not 'count' as an argument, as it is part of the predicate, albeit an independent and meaningful part see 14.1 for further discussion of these issues).

| Yá-né-nì=ne | $p a$ | $p e=h i ́-h i ́ . ~$ |
| :--- | :--- | :--- |
| sister-1SG.DAT-1SG.GEN=1SG.DAT | water | 3SG.F=wash-RED |
| 'My sister is washing.' |  |  |

(57) * [s yá ne nì ne pe] pa pe hí-hí

We must regard $p a$ and $h i ́$ as independent words because of their having separate tonal domains, because of their separation from each other by the pronominal agreement clitic, and more importantly, because of the paradigmatic replaceability of $p a$ by another appropriate noun designating a place/means of bathing: tî 'sea', for instance (Yá né nè ne tí pe hí hí 'My sister is washing in the sea.'). More details on adjunct nominals and their syntax can be found in chapter 14.

### 3.10 Medial clause forms: switch reference marking

In common with many languages of New Guinea, though somewhat unusually for a non Trans New Guinea language, Skou possesses a set of medial verb forms (see chapter 19). One major departure from the Trans New Guinea model is that the sentence-medial forms are simply added to the final verb forms: there is no loss in morphological material in a medial form compared to a final form.

The medial verbs are formed with the morphemes $=p a$ (elsewhere used to mark instrumental nouns and to conjoin NPs) and =ko (not attested elsewhere in the grammar), as seen in the following examples:
$K e=t o e=p a \quad k e=t a k$-ùng.
3SG.NF=3.come=INSTR 3SG.NF=sitting 3SG.NF-sit
' $\mathrm{He}_{\mathrm{i}}$ came and then he $\mathrm{e}_{\mathrm{i}}$ sat down.'

$$
\begin{align*}
& \text { Ke=toe=koreve=tak-ùng. }  \tag{59}\\
& \text { 3SG.NF=3.come=OBV 3SG.NF=sitting 3SG.NF-sit } \\
& \text { 'He }{ }_{\mathrm{i}} \text { came and then he } \mathrm{j} \text { sat down.' }
\end{align*}
$$

The translations given are the most 'unmarked' readings of the sentences; that given for (58) is the only likely reading. (59), however, can also be construed with the reading 'He ${ }_{\mathrm{i}}$ came and then he sat down.' if there has been a sufficient lapse of time between the coming event and the sitting down event. For this reason it is better not to refer to the switch reference system encoded in Skou as involving same versus different subject, but rather as involving same versus different reference (of subject or temporal setting, or both).

Another major departure from the canonical Papuan model of medial verbs and final verbs taking different inflectional possibilities is the (frequently heard) option of a non-final verb can appear without either of the 'medial' forms being used, in what is clearly not a serial verb construction. 19.5 discusses many of the complications arising from the switch reference system and its interpretation.

### 3.11 Distinguishing syntactic roles and grammatical functions

The two core arguments of a bivalent clause can be distinguished from each other and from the oblique and adjunct arguments on the basis of their behaviour along the following morphosyntactic lines:

- Any of A, S or P, but never an oblique or adjunct, may:
- depending on the lexical item and the clause in which it is found, be indicated on the verb by means of vowel alternations (see 7.2.3);
- show raising when the clause they are in is the complement of a psych or perception verb (see chapter 15).
- S and A are:
- regularly indexed on the verb by means of prefixes and/or proclitics (see 7.2.1, 7.2.2), whereas P is never marked in this way;
- treated as a single unit for the purposes of determining the choice of obviation marking at the end of a clause in a string of clauses (see 19.5);
- the only targets of control in complementation constructions (see chapter 15 );
- S and P may be the restriction of a postverbal floating quantifier fátà, while this is not possible for an A (see 16.3);
- A is optionally marked by an ergative summation pronoun final in the nominal phrase that indicates this argument, whereas this strategy is not possible for an S or a P (see 3.2 and 6.3.2);
- a possessed P may mark its possessor's gender or number features on the verb, while this strategy is not possible for an S or an A (see 9.5.2);
We can see that there are no special properties associated with nominals in other than A, S and $P$ functions, and so we may talk of a set of core arguments, defined both positionally and (for those in preverbal position only) morphosyntactically.

In addition to the core arguments A and P , or S , of which there are almost never more than two for a given verb, various extra arguments may appear in a clause. (For strategies involved in translations of verbs which would be treated as ditransitive in other languages, see 5.4.4) We can identify five categories of nominals in the clause, based on morphosyntactic criteria:

- postverbal, unmarked
- postverbal, genitive marking
- preverbal, instrumental marking
- preverbal, unmarked
- strictly adjacent to verb, unmarked

The nominals in these four categories are not a unified group in the sense that $\mathrm{A}, \mathrm{S}$ and P can be thought of as commonly sharing properties associated with core grammatical functions. Rather, the obliques are simply the group of nominals in a clause which are not core. Examples of each of these structural categories are given in the following sentences:

Postverbal location
(60) Ke ke=moeng bàme. 3SG.NF 3SG.NF=sit village
'He's in the village.'
Postverbal goal
(61) $\mathrm{Ke} k e=t i \quad$ bàme. 3SG.NF 3SG.NF=3SG.NF.go village
'He went to the village.'
Postverbal beneficiary
(62) $K e ~ k e=t i \quad t e=b a ̀-t e ̀=t e$.

3SG.NF 3SG.NF=3SG.NF.go 3PL=person-3PL.GEN=3PL.DAT
'He went for the people.'
Preverbal instrument
(63) $K e \quad t a n g=p a \quad k e=t i$.

3SG.NF canoe=INSTR 3SG.NF=3SG.NF.go
'He went by a vehicle.'
Clause-initial temporal
(64) Fé-ung ke $k e=t i-t i$. morning-now 3SG.NF 3SG.NF=3SG.NF.go-RED 'He'll go tomorrow.'

Adjunct to the verb
Ke kúhe ke=ti.
3SG.NF fall 3SG.NF=3SG.NF.go
'He fell over.'
The matter of applicatives, their postverbal objects, and other atypically coded objects will be discussed with in 5.4.3.3, and in 13.2.

### 3.12 Changing valency

There is a productive applicative in Skou, discussed in 13.2, but the only means of causativising involves analytical constructions with the 'generic' verbs $l i$ 'do' or leng 'give' providing the causation (13.1), or else a more semantically explicit combination with a causing verb and a verb expressing the result. Whichever method is chosen, there is no morphological alternation on the base verb. Additionally, a small number of verbs can be used in either monovalent or bivalent predicates, without any special morphology licensing the choice of number of arguments. These are mentioned in 5.4.2.

There is also a (semi-)productive mechanism by which a clause is marked as having a lower valency than is specified in the root. This is, then, in the nature of a passive construction, formed by means of a serial verb construction with wí, related to (but not identical with) 'get, receive (feminine object)'. This is perhaps not that surprising from a world perspective, but in the New Guinea area, amongst non-Austronesian languages, such examples of genuine syntactic alternation between the grammatical functions assigned to arguments are vanishingly rare, being only reliably reported for Barai (Olson 1981, Foley 1986) and Tanglapui (Donohue 1996) (Examples of voice alternations, without valency reduction, can be found in Papuan Tip Austronesian languages such as Saliba, Misima and Tawala, and in Cenderawasih Bay languages such as Ambai and Ansus, but these are Austronesian languages displaying a reflex of the functional oppositions present in the better-described Western Austronesian languages.) This passive construction is the subject of much discussion in 13.3, where I argue that, despite being in many ways an a atypical exemplar of a voice system, the alternations that we can observe in Skou are in fact a real example of an active:passive system.

### 3.13 Summary

The essential overview of Skou morphosyntax has already been presented at the end of chapter 1 , and is repeated here in more detailed form, with explicit arguments for the decisions that have been made. We can compare the broad morphosyntactic criteria as they apply to the different argument types in Skou. Table 80xxx presents an overview of the position, nominal marking, and verbal agreement possibilities as they apply to the different types of participants in the clause.

Table 80. Coding characteristics of different participants

|  | Pre-/postverbal | NP marking | verbal agreement |
| :---: | :---: | :---: | :---: |
| A | A P V | (=PRO.ERG) | PRO= PRE- $\left\langle\mathrm{V}_{\text {[VOWEL] }}{ }^{\text {l }}\right\rangle$ |
| S | S V |  | PRO $=$ PRE- $\left\langle\mathrm{V}_{\text {[VOWEL] }}{ }^{\text {[ }}\right\rangle$ |
| P | A P V |  | < $\mathrm{V}_{[\text {VOWEL }}{ }^{\text {] }}$ > |
| ADJ.NOM instrument | AN V / V AN (INSTR V) | $=p a$ |  |
| beneficiary | V BEN AUX | -POSS |  |
| goal | V GOAL AUX |  |  |
| location | V AUX LOC |  |  |
| time | TIME S/A P V |  |  |

There are complications to this neat schema. When we examine instruments in clauses with bivalent verbs, we see that there are in fact two possible positions in which an instrument may appear, either before or after the object:

Pre-P instrument
$K e=b a ̀=i n g \quad$ rangwaue $=p a \quad$ rí $k e=l u ́ e . ~ . ~$
3SG.NF=man=the axe=INSTR tree 3SG.NF=chop.repeatedly
'The man is chopping the wood with an axe.'
Post-P instrument

$$
\begin{array}{lll}
\text { Ke=bà=ing a rí } & \begin{array}{l}
\text { rangwaue=pa }
\end{array} & k e=\text { lúe } .  \tag{67}\\
\text { 3SG.NF=man=the tree } & \text { axe=INSTR } & \text { 3SG.NF=chop.repeatedly }
\end{array}
$$

Furthermore, we sometimes find instruments in postverbal position: not all speakers accept this, and not in all sentences, though the conditions that make it acceptable or not are, if not idiosyncratic, certainly difficult to determine.

Oblique arguments and time adverbs are positioned at the periphery of this nuclear clause, with instruments appearing internally and marked by the case marker $=p a$. This can all be summarised in the following templatic model of the clause in Skou.

Positions for oblique arguments in the clause
Time


Unlike other obliques, which are strictly placed in invariant positions, the instrument may appear in any pre-V' position. It is preferred between the A and the P , but can also appear preceding the A (though this is probably simply the result of the instrument appearing with topicalisation), and has been heard following the P. In these latter cases, following a nominal P, speakers universally 'correct' these sentences if the position of the instrument is pointed out to them, moving the instrument to an immediately pre-P position. It seems, then, that the most natural position for the instrument to appear in is adjoined to the VP, preferably left-adjoined. Note that the existence of an instrument in a clause preverbally does not affect the grammaticality of a goal or location following the verb, while it does not seem possible for a postverbal instrument to cooccur with another postverbal oblique. The position of time adjuncts
implies that they, too, are left-adjoined. Because they typically precede a nominal subject we must assume that they attach at the IP level rather than to the VP. Locations, and goals, however, are not represented as instances of the same adjunction rule, since they are mutually exclusive, both with each other and with other postverbal elements of a sentence. For this reason, as well as the constituency tests described in 4.2.2, they appear 'hard-wired' into the phrase structure. While unusual from a universalist position, this is not an unusual stance in the (North-Central New Guinean) areal context in which we find Skou.

Adjunct nominals form a very close constituent with the verb, often appearing inside any proclitic inflection, and in some cases assimilating to the verb (see 14.5.1.3). These are then shown as having their own constituent with the verb, inside the VP.

The obligatory realisation of two arguments in clauses with bivalent verbs is not shown in the phrase-structure representation, since it is the product of the interaction of phrase structure constituency with the argument structure representation of a particular verb (see 5.4). The pronominal status of some, but not all, elements of the verbal agreement paradigms (see 7.3) provides further proof that the obligatory valency status of certain predicates is not a phrasestructural concern.

We can remodel the flat, templatic structure shown above in the following hierarchical tree, which captures the different levels present in a Skou sentence.


Justification for these different phrase-structural levels can be found in the following facts:

- time expressions are left-adjoined to the S-level; they are not commonly found in a sentence that additionally has a (leftward) topicalised nominal;
- instrumentals may appear left-adjoined to either the VP or the $\mathrm{V}^{\prime}$ level;
- serialisation occurs with coordinate VPs, and allows only object NPs and goal NPs to intrude between the constituent Vs;
- topicalisation applies to VPs, rather than Vs; it includes goals, but excludes locations.
- locations or goals in negated clauses appear preceding the $\mathrm{V}^{\prime}$, but inside the scope of the VP.
- the V' unit cannot be intruded upon by any other elements.

On the level of grammatical functions we can posit the functions subject, object and oblique; we cannot motivate a distinction between (subcategorised-for) obliques and completely optional adjuncts, apart from by an appeal to the subcategorisation frame of the verb. The salient morphological tests that identify subject, a grouping of $S$ and $A$ arguments, versus object, the (primary) P in the clause, have already been seen in table 80. In table 81 we can see the syntactic differences between the main grammatical functions.

Table 81. Syntactic tests for grammatical function status

|  | Interclausal | Intraclausal |
| :---: | :---: | :---: |
| Subject | coreference monitored by choice of $=p a$ or $=k o$ shows raising in jussive complements |  |
| Object | shows raising in jussive complements | alternates with subject in a passive construction |
| Oblique | raises to object in perception complements | unmarked position is postverbal |

In addition to these large syntactic groupings we should note that some syntactic phenomena refer to other groupings, such as quantifier float, which can only be interpreted as referring to an argument that is an S or a P. 3.11 details the more salient of these different configurations.

## 4 Pragmatic marking

As stated in the previous chapter, and as appears to be true for all natural languages for which we have reports of any depth, variations on sentence structure are common. The ways in which the canonical word order and marking patterns described in brief in the previous chapter (and which are of course elaborated on in more depth in the rest of the book) can be perturbed, and the tendential patterns that are associated with these perturbations, are described in this chapter.

Because topicality is inherently associated with given information, such NPs are often marked with demonstratives, and so these, and the restrictions on their use, are also described in this chapter.

### 4.1 Parameters of pragmatic variation

In addition to the basic sentence structures shown in the previous chapter, pragmatic factors often cause the sentence to appear in a different arrangement. This was mentioned briefly in 3.1, where the effects of topicalisation on the structure of the clause were described. There are three parameters under which the order and morphological coding of elements in a clause can show variation. These are:

- word order variation
- variation in syntactic status
- explicit marking for pragmatic force

The first two of these parameters will be discussed in detail throughout this chapter. The last parameter, explicit marking for pragmatic force, is tied in to the system of deictic reference, and will be discussed in 4.7.

### 4.2 Variation in word order: topicality and contrast

As discussed earlier in 3.1, there is a very strict configurationality requirement on clauses in Skou that they must follow an SOV word order; different oblique arguments may appear in different positions in the clause, with instruments optionally preverbal and marked for function, and all possibly postverbal, morphologically marked and unmarked depending on semantic role and function. The evidence for a VP constituent is strong.

In addition to this strict interpretation on word order there is a pre-sentential topic position, which may be filled by any of the nominals of the clause. There is no resumption of the topicalised phrase in the clause unless it must appear on the verb as an agreement marker.
(1)


The reasons for labelling the topic element as an XP, and not simply an NP, will be apparent at the end of this section.

### 4.2.1 NP topics

The constituent most commonly encountered in a topicalised position is the NP. An example of the variation we encounter can be seen when we examine a P appearing in normal, topicalised, and focussed contexts can be seen in the following sentences:

Normal pragmatic prominence:
Ke=húng $\quad \mathrm{ke}$

| tángrù̀e=ing a pìng ke=lú. |
| :--- |
| 3SG.NF-Sentani |
| 3SG.NF.ERG cassowary=the bow |

'The Sentani man shot that cassowary.'

## Topicalised P:

(3)

| Tángrùe=ing | ke=húng | ke | pìng | $k e=l u ́$. |
| :---: | :---: | :---: | :---: | :---: |
| cassowary=the | 3SG.NF-Sentani | 3SG.NF.ERG | w | 3SG.NF=release |
| ${ }^{\text {'The cassowary }}$ | he Sentani man sh |  |  |  |

Focussed P:

| Ke=húng tángrùe=ing $a=k a \quad$ ping | $k e=l u ́$. |  |
| :--- | :--- | :--- | :--- |
| 3SG.NF-Sentani 3SG.NF.ERG cassowary=the $=$ FOC | bow | 3SG.NF=release |
| 'The Sentani man shot the cassowary.' |  |  |

The topic need not necessarily be closely connected to the rest of the following clause (in the sense of being subcategorised for by the verb). Examine the following sentences:

Jéng, yano $n i=l o ́ e=k o \quad$ péng.
place work $1 \mathrm{SG}=\mathrm{get}$.PL=OBV tidy
'That place, I cleaned it up and now it's tidy.'
Jéng=fue $a, \quad r i ́ \quad n i ̀=l o ́ e ~ k a . ~$
place=that wood $1 \mathrm{SG}=$ get.PL NEG
'That place, I took all the (fire)wood away.'
In (5) the topic is related to the subject of the clause headed by péng; it cannot be construed as either the subject ( $n i$ ' $I$ ') or the object (arguably yano 'work') of the immediately following clause, but is clearly the subject of the resulting state. This is good evidence that the pragmatic notion of topicality in Skou is independent of the grammatical notions of subjecthood and objecthood.

Information which is coded as highly topical in the sense employed here has a separate structural position, preceding the rest of the sentence. Although there is not a regular position for contrastive focus or question words (though there are some morphological possibilities for the marking of questions - see 18.2), we can see that there is a morphological marker that appears with words that lack inherent focus, and marks them as focussed. Words with inherent interrogative focus, such as bá 'who', do not appear with overt pragmatic markers of focus, as seen in the ungrammaticality of (8).
(7) Bá $\quad$ mè=fue?
who $2 \mathrm{SG}=$ see
'Who did you see?'
(8) * bá $=k a \quad$ mè $=f u e$ ?
who=FOC $2 \mathrm{SG}=$ see
Despite this such a morphological marker may appear on the informational response to such a question, as in (9), a felicitous response to (7). (10) and (11) present other uses of pragmatic markers.
(9) $K e=a \quad n i ̀=f u e$ ?

3SG.NF=FOC 1SG=see
'I saw him.'
$K e=a=r a \quad$ pále nawò $k e=j i ́$.
3SG.NF=PROM=also pig many 3SG.NF=hit.PL
'He, too, has killed many pigs.'

| Nìl lúe | tangnófo-nì=ne | $m e ̀=a=b-e ́$. |
| :--- | :--- | :--- |
| 1SG=know | knife-1SG.GEN=1SG. DAT | $2 \mathrm{SG}=\mathrm{PROM}=2 \mathrm{SG}$-get |

Topicalisation that entails the use of this structural position is restricted to highly salient, animate referents, which must be normally marked with a deictic (at least) if it is overtly present in the clause.

| Jáwung=ing $a$, | ne=me | wówó moe ti, |
| :--- | :--- | :--- |
| Nyao=the | 1PL=return.PL | uncle return 1PL.go |

$=p a \quad n e=n e \quad t i-t i$.
$=$ INSTR 1PL=1PL.go 1PL.do-RED
'Nyao, we went (there), my uncle went there (first), and then we all went.'
... táng=ing, te te=bíng fátà, bird=DEIC 3PL 3PL=kill all ' $\ldots$. and those birds, they killed them all, ...'

Alternatively, the topical position may be used to code a contrast, which has been established from both the clause-external position and the contrast with a preceding clause:

| Yu-né-nì=ne | hòe | $k e=k$-ang | $k a$, |
| :--- | :--- | :--- | :--- |
| brother-1SG.DAT-1SG.GEN=1SG.DAT | sago | 3SG.NF=3SG.NF-eat | NEG |

kóe $=r a=w o ́=\operatorname{ing} a, \quad y u-n e ́-n i ̀=n e$
fried.sago=also=EMPH=the brother-1SG.DAT-1SG.GEN=1SG.DAT
$k e=k$-ang-kang li.
3SG.NF=3SG.NF-eat-RED do
'My brother doesn't like to eat sago (jelly), but fried sago, my brother would like to eat it.'

```

The following example starts out with a shift in narrative focus to taingbe 'money' from the first person narrator, but then the speaker decides to re-establish herself as a topic. In this topic re-establishment there is clearly contrastive weight given to this new topic, and it is marked with a whole string of markers of pragmatic salience.
\begin{tabular}{lll} 
Taingbe & \(k e=b a l e ́ n g-n i ̀=n e\) & \(k e=w a ́ n g=\) ing \(a\), \\
money & 3SG.NF=male-1SG.GEN=1SG.DAT & 3SG.NF=die=the
\end{tabular}
a nì=ra=wò=fa=ing \(a, \quad\) nì=lóeng
ah \(1 \mathrm{SG}=\mathrm{also}=\mathrm{EMPH}=\mathrm{only}=\) the \(1 \mathrm{SG}=\mathrm{say}\)
"Pá hápa ketong li"" li=ko,
house small little do do=OBV
'Now money, my husband has died, and me, I said "Make a little
house",...'

It is normal, as in all languages, for a non-contrastive and previously established topic to simply be omitted from the clause, if it can be retrieved from the recent context. The following extract from the text Te Táng pìng-tè, lines 54-55, shows that, having been established as the topic, the NP Amerika is then omitted in the following sentence in which it is still the subject. There is no nominal subject, and the two VPs (including the proclitic agreement on the verbs) are all that is overtly mentioned. The pronominal indexing on the verb is sufficient mention to anaphorically refer to the established topic (though it is infelicitous to begin a stretch of discourse with purely proclitic agreement markers for third persons; see 7.3).
\begin{tabular}{|c|c|c|c|}
\hline Amerika & a te=hòe & toe ping & \(t e=t i\), \\
\hline America & 3PL=arrive & 3.come war & \(3 \mathrm{PL}=3 \mathrm{P}\) \\
\hline \(\emptyset\) te & te=bà Jepang & \(t e=j i ́\) & \\
\hline & 3PL=person Japan & 3PL=hit.PL & 3PL.b \\
\hline \(\emptyset\) & \(n e=b a ̀ ~ M o e ~\) & \(t e=j i\) & \(k a\). \\
\hline & \(1 \mathrm{PL}=\) person Papua & 3PL=hit.PL & NEG \\
\hline
\end{tabular}
'America came and waged war, they killed the Japanese, but they didn't kill us Papuans.'

We have seen that once a topic has been established the NP reference to such an argument, with either nominals or free pronouns, is frequently not required in subsequent clauses. The extent to which different pronominal agreement markers can be considered full (or partial) pronominal elements is discussed in 7.3. We have also seen that, when establishing a new topic, overt mention of the NP, regardless of its syntactic role in the clause, is in a sentenceinitial, pre-clausal position.

\subsection*{4.2.2 Non-NP topics}

So far we have examined instances of topicalised NPs. We have seen NPs with a variety of different grammatical functions, but all have been structurally the same, NPs. These are not, however, the only constituents that can be found preclausally. The following pair of sentences illustrate first a clause without any topicalisation (elicited subsequent to the discovery of the second sentence following), and secondly a variant of this clause with the predicate as topic.
(17) Bàng moerító \(k e=k\)-ang. yesterday fish(sp.) 3SG.NF=3SG.NF-eat 'He ate some Yellowtail scad yesterday.'
\[
\begin{array}{llll}
\text { [Topic } & \text { Moerit́ó } & k e=k \text {-ang=ing a ], } & \text { bàng } \tag{18}
\end{array} \quad k e=l i .
\]

This structure differs from topicalisation structures involving a topical NPs, such as has already been described, by the fact that, unlike those topicalisation constructions, there is a 'remnant'
left behind, the inflected form of the verb 'do'. The sentence is not grammatical without a verbal form appearing inside the clause; compare (16) which shows a topical VP and a remnant 'do' verb, with the ungrammatical (17) in which there is no 'do'.
* moerító ke kang ing a, bàng \({ }^{33}\)

It is quite possible for more elements to be 'left behind' in the non-topicalised part of the clause, but the presence of 'do' is still obligatory.

Moerító \(k e=k\)-ang \(=\) ing \(a, \quad\) bàng \(k e=b a l e ́ n g ~ k e=l i\).
fish(sp.) 3SG.NF=3SG.NF-eat=the yesterday 3SG.NF=man 3SG.NF=do 'Eating Yellowtail scad, the man did (it) yesterday.'
(21) * moerító ke kang ing a, bàng ke baléng

In the examples above we have seen that not only the verb but also the P of the clause appear initially. Again, these sentences are only grammatical if the full VP is in the topic position, and placing the verb, but not the object, in the preclausal position is ungrammatical, as seen in the following sentence.
(22) * ke kang ing a, bàng ke baléng moerító

The requirement that a full VP be topicalised as a unit when the V is topicalised means that goals, too, must appear in the preclausal position if the predicate is topicalised. The following sentences show a clause without topicalisation, the same clause with a topicalised predicate, and an ungrammatical attempt to topicalise the verbal part of the predicate without the goal.
(23) Fetànghapa te=angku nawò te=y-a tà . t-o
morning 3 PL=child many 3 PL=3PL-walk running 3 PL-seaward
te bàng.
3PL.go beach
'This morning a lot of children ran to the beach.'
(24) [торіс Te ya tà to te bàng ing a ], fetànghapa te angku nawò te ti.
'Running to the beach, a lot of children did this morning.'
(25) * te ya tà to te ing a, fetànghapa te angku nawò te ti bàng

Since locations are not inside the VP (see 3.13), they are not part of the topicalised constituent. Take note of the position of pá 'house' in the sentences with topicalisation, (25) and the ungrammatical (26).
\(\begin{array}{llll}\text { È-ke-ké }=k e & \text { hòe } & p e=t u e & \text { pá. } \\ \text { wife-3SG.NF.DAT-3SG.NF.GEN=3SG.NF.DAT } & \text { sago } & \text { 3SG.F=3SG.F.do } & \text { house } \\ \text { 'His wife is making sago jelly at home.' } & & & \end{array}\)
(27) [торіс Hòe pe tue ing a ], èke ké ke pe tue pá.
'Making sago jelly, his wife is doing (it) at home.'

\footnotetext{
33 With the time phrase as an afterthought, this string can be grammatically interpreted: 'He ate some Yellowtail scad - it was yesterday.' This interpretation is not possible when additional elements are present following the intonation break, however, as in (19) or (21).
}
(28)
* [Topic hòe pe tue pá ing a ], èke ké ke pe tue
'Making sago jelly at home, his wife is doing.' 34
As well as their different positions with respect to auxiliary placement, these data from topicalisation firmly established the distinct coding of goals and locations. With respect to topicalisation, it also establishes that entire phrasal projections, and not simply individuallexical items, are the elements that may appear preclausally.

The two constituent that we have established as eligible for topicalisation, NPs and VPs, are just that: constituents. It is not possible for one element of a phrasal constituent to appear in a topical position while the rest remains inside the clause in a non-topical position. We have seen this with respect to the topicalisation of predicates, but it has not been explicitly demonstrated for elements of an NP. The following grammatical sentences show the appearance of modified nouns in topic position, with ungrammatical paraphrases showing either the noun or the adjective in a clause-internal position while the other element appears in the preclausal position.

Grammatical: subject topicalised
Naké makí=ing a, ung a ke=angku boeboe ke=lá.
dog big=the now 3SG.NF=child growl
3SG.NF=utter 'The big dog, now it's growling at the boy.'

Ungrammatical: Subject N topicalised, Adjective in clause-internal position
* naké=ing \(a\), ung a makí ke=angku boeboe ke=lá dog=the now big 3SG.NF=child growl 3SG.NF=utter

Ungrammatical: adjective topicalised, Subject N in clause-internal position
\(\begin{array}{llllll}\text { * makí=ing } a, & \text { ung a naké } & \text { ke=angku boeboe } & \text { ke=lá } \\ \text { big=the } & \text { now } & \text { dog } & \text { 3SG.NF=child growl } & \text { 3SG.NF=utter }\end{array}\)
Grammatical: object topicalised
Pulé hápa=ing \(a, k e=a \quad\) pìng \(k e=l u ́\). cuscus small=the 3SG.NF=FOC bow 3SG.NF=release 'The small cuscus, he's the one who shot it.'

Ungrammatical: object N topicalised, Adjective in clause-internal position
\[
\begin{array}{lllll}
\text { * pulé=ing } a, & k e=a & \text { hápa } & \text { pìng } & k e=l u ́  \tag{33}\\
\text { cuscus=the } & \text { 3SG.NF=FOC } & \text { small bow } & \text { 3SG.NF=release }
\end{array}
\]

Ungrammatical: adjective topicalised, Object N in clause-internal position
\[
\begin{array}{cllll}
\text { * hápa=ing } a, & k e=a & \text { pulé } & \text { pìng } & k e=l u ́  \tag{34}\\
\text { small=the } & \text { 3SG.NF=FOC } & \text { cuscus } & \text { bow } & \text { 3SG.NF=release }
\end{array}
\]

Another morphologically overt means of coding pragmatic salience is the use of applicatives with goals, to code the goal as an object rather than as an oblique argument. In addition to its

\footnotetext{
34 It is, of course, possible to topicalise the location without the verb, as in [topic Pá ing a ] èke ké ke hòe pe tue 'In the house, his wife is making sago jelly.' One could argue that, given the grammaticality of clauses with multiple topics, (28) could be parsed grammatically as having two topics, hóe pe tue and pá: [торіс hòe pe tue ] [торіс pá ing a ], èke ké ke pe tue. This is not accepted by speakers, who find it more acceptable (though still pragmatically unlikely) if both putative topics are marked with deictic clitics: [Topic hòe pe tue ing a][Topic pá fue a ], èke ké ke pe tue.
}
syntactic effects, this coding strategy is associated with a higher level of salience in the discourse, as is normal cross-linguistically. These are described in more detail in 13.2. High pragmatic salience may be coded without the use of the preclausal topic position but with a 'stack' of pragmatic deictic markers, as described in 4.6.

\subsection*{4.3 Variation in word order: 'focus'}

Unlike many AVP languages, there is not a special structural position for focussed constituents in Skou, in the sense that Wh-questions in English must appear clause-initially, or that focussed material has a special position, as in Hungarian. On the other hand there is certainly a pragmatic salience associated with the postverbal position, with the arguments of some verbs showing alternative codings in this position: when a verb allows this coding (see 5.4.3), the AVP coding option always conveys a slight sense of contrastive focus on the \(P\), while the AVP clause lacks this necessary focussed reading. Focus may be marked on any participant in situ, and inherently focussed material may appear in its normal position (this has been mentioned in 4.2 in passing).

The following sentences show question words for the three core syntactic functions appearing in their normal places in the clause. Notice that there is neither any 'fronting' of the question word, evidenced by the constant sentence-initial position of the time expression ung a 'now', nor is there any obligatory preverbal positioning, demonstrated by the order of elements in (35) in which the questioned A is separated from the V by the object hòe, and is separated from the start of the clause by the time expression ung \(a\) (this is further discussed and exemplified in 18.2).

Questioned A
\begin{tabular}{llll} 
Ung a bá hòe pe=tue & \(e\) & tue? \\
now who sago 3SG.F=3SG.F.do & 3SG.F.be & 3SG.F.do \\
'Who's cooking sago now?' & &
\end{tabular}

Questioned S
Ung a bá pe=te e tue fue a? now who 3SG.F=3SG.F.go 3SG.F.be 3SG.F.do there 'Who's going there now?'

Questioned P


Not questioned, but morphologically focussed material, also appears in the same position. The usual markers of focus are \(=k a\) or \(=a\), they do not show any difference in syntactic restrictions.

Focussed A
\[
\begin{array}{lllll}
\text { Ung a pe=ing=a } & \text { hòe } & p e=\text { tue } & e & \text { tue! }  \tag{38}\\
\text { now 3SG.F=DEIC=PROM sago } & \text { 3SG.F=3SG.F.do } & \text { 3SG.F.be } & \text { 3SG.F.do } \\
\text { 'Now she's cooking the sago!' } & & &
\end{array}
\]

The analysis of the sequence [ia] following pe as two clitics, not one, comes from the inability of this sequence in this clause to occur with the 'also' clitic \(=r a\); \(=r a\) is incompatible with \(=a\), but is compatible with =ing a 'the' (see 4.9).

\section*{Focussed S}
(39)
\begin{tabular}{lllll} 
Ung a te=angku=ka & te=meng & \(e\) & \(t i\) & nè? \\
now & 3PL=child=FOC & 3PL=sit.PL & 3PL.be & 3PL.do
\end{tabular}
'And where are those kids now?'
(this example shows that when a location is pragmatically focussed it must appear in its normal postverbal position)

Focussed P
Ke=Téme=ing a \(\quad\) pe=ueme \(=k a=f u e ~ a \quad k e=l a ́ n g . ~\)
3SG.NF=Nafri=that 3SG.F=woman=FOC=that 3SG.NF=hit.F
'The Nafri guy hit that woman.'
We can show that the position occupied by these focussed NPs is not the same as the preclausal topic position by examining the relative position of time expressions with topics or with focussed elements. Compare (39) above with the analogous (41). While in (39) the temporal ung a appears preceding te angku ka, in (41) we can see te angku fa ing a preceding the same time expression. Swapping the order of the child NP and the time expression in either case would result in ungrammaticality or, at best, infelicity, as seen in (42) and (43).
(41) \(T e=a n g k u=f a=i n g a\), unga a nà te=oe \(e \quad t i \quad\) fue \(a\). 3PL=child=only=the now play 3PL=play 3PL.be 3PL.do there 'Those kids, they're playing over there.'
(42) * te angku ka ung a te meng e ti nè?
(43) */\# unga a te angku fa ing a nà te oe e ti fue a.

We can discern a clear pattern of competition between different elements in a clause to appear in the postverbal position(s). While obliques, adjunct locations and negation are all postverbal elements of the clause, only one can appear at a time (see chapter 16). While time expressions are typically found clause-initially, they can, when being emphasised, appear postverbally, as in (44). This effectively codes the normally clause-initial temporal in the position that we would expect to find a location. That is, it is an oblique-coding strategy.

TOPIC PREDICATE PROMINENT
\[
\begin{align*}
& \text { Te=bà húefa te=te } \quad \text { ung } a=\text { we. }  \tag{44}\\
& \text { 3PL=person old 3PL=3PL.do now=this } \\
& \text { 'The old people do it now, ... (but before younger people did it in their } \\
& \text { stead).' }
\end{align*}
\]

When a time expression appears postverbally like this it is not necessarily separated from the rest of the clause by any special intonation break, but is frequently (in the context of a highly limited number of naturally occurring examples) marked with one of the demonstrative clitics, be it locative, referential or pragmatic. A wide variety of morphological markers are used to show degrees of pragmatic salience. These are described in 4.7 and 4.9.

\subsection*{4.4 The grammaticalisation of pragmatic variation}

Pragmatic functions such as 'focus' are expressed by morphological means, with the particles \(a\) or \(k a\), and these can be applied typically to a core argument. The expression of topicality is also usually associated with overt morphological marking, but this is not compulsory.

While a non-core argument may be pragmatically salient, it is preferable to code a salient argument as a core. For instance, a question (or answer) about the identity of an instrument can be coded with the instrument marked as an oblique:
\[
\begin{array}{lll}
\text { Ya=pa } & k e=\text { Húng-tè=ing } & k e=k i ́ ?  \tag{45}\\
\text { what=INSTR } & \text { 3SG.NF=Sentani-3PL.GEN=DEIC } & \text { 3SG.NF=stab } \\
\text { 'What did he stab the Sentani man with?' } &
\end{array}
\]

It is more natural, however, to mark the focussed nominal as a direct argument of a verb, even if this entails complicating the clause with a serial verb construction.
\[
\begin{array}{lll}
\text { Ya } k e=k e ́=k o & k e=\text { Húng-tè=ing } & k e=k i ́ ?  \tag{46}\\
\text { what 3SG.NF=get=OBV 3SG.NF=Sentani-3PL.GEN=the } & \text { 3SG.NF=stab } \\
\text { 'What did he stab the Sentani man with?' } &
\end{array}
\]

In this way we can see a degree of grammaticalisation operating in the way identificational focus is marked: there is a preference for more salient information to be coded as a core grammatical function, thus object rather that oblique. Obliques carry less pragmatic force than do core arguments, and so are not so suitable for coding inherently salient information, such as focussed information marked by question words.

\subsection*{4.5 The postverbal position and the coding of transitivity}

A very small number of verbs allow for variation in the position in which their object is coded, in that it can appear either before or after the verb. Appearing before the verb is the normal position for a nominal object in Skou, and the only nominals that can appear in a postverbal position are goals and locations.

I have described the preverbal positions in terms of grammatical functions, and the postverbal position in terms of semantic roles. This is not accidental. There are strong correlations between position in a clause with respect to the verb and grammatical function, as described in 3.13. For the small number of verbs described in 5.4.3.3 there is variation in the position taken by the P with respect to the verb. With both hi' 'throw (at goal)' and héng 'ask' the P may occur either before or after the verb. While both positions are possible, they are not equal. There is a clear correlation between the position of the NP and the degree of implied affect. This phenomenon is discussed in greater detail in 5.4.3.3.

One other option peculiar to this position deserves mention, and that is the optional genitive coding for postverbal pronouns. This is also described in 5.4.3.3.

\subsection*{4.6 The deictic system}

Apart from the pronominal system, reference to a specific set of locations is accomplished in Skou by three systems:
- the non-pronominal demonstratives (which appear cliticised, usually to the NP head);
- the use of deictically-oriented verbs to indicate direction;
- the use of locative adverbs that specify where, or which part, with respect to an object, an action or event is situated.

While these are all separate systems they can be treated together because of co-occurrence restrictions: a deictically-oriented verb is only rarely used in the same sentence as a locative adverb, for instance. Additionally, the marking of focus, although serving a different function to locational deixis, is treated in this section, since it appears in the same paradigmatic position in the NP as do the demonstratives (though there are some complications when combined with other clitics, as described in 4.7.3).

\subsection*{4.7 Demonstratives}

The words that fit into the class of demonstratives in Skou are used to mark not only deixis in space, but also more purely pragmatic notions such as definiteness and focus (there is no conclusive evidence that the deictics are used for temporal reference). While they are separate semantic groups, the morphemes listed here occur in the same syntactic positions, and so can be justifiably listed as one lexical class, despite there being some variation within that class (see 4.7.3). The morphemes found in this structural position are shown in table 82 xxx , split into three groups, those referring to more exclusively locative reference ideas, those that take the discourse context as their determining factor, and those that are pragmatically motivated, and so reflect the speaker's evaluation of the relative salience of different participants in the speech act.

Table 82. Deictics
\begin{tabular}{|c|c|c|c|c|}
\hline & Skou & Meaning & Gloss & Common variants \\
\hline \multirow[t]{2}{*}{locative} & wi a & this, proximal & this & [wiya], [we] \\
\hline & fue a & that, distal & that & [f\#a], [fuwa] \\
\hline \multirow[t]{2}{*}{referential} & ing \(a\) & definite & the & [ia], [ila], [pas] \\
\hline & ing & deictic reference & DEIC & [1] \\
\hline \multirow[t]{7}{*}{pragmatic} & \(a\) & prominence marker & PROM & [a] \\
\hline & ka & (focus) & FOC & [ka], [ya] \\
\hline & ra & also & also & [ra] \\
\hline & fa & only, just & only & [fa], [ma] \\
\hline & pí & even & even & [pi] \\
\hline & wò & emphatic & EMPH & [wo] \\
\hline & ke ing (a) & that one, (assumed knowledge) & \[
\begin{gathered}
\text { 3SG.NF } \\
=\text { the } \\
\hline
\end{gathered}
\] & [kilu, [kej], [kipa] \\
\hline
\end{tabular}

The first four of these markers, those labelled 'locative' and 'referential', are fairly standard demonstratives, any of which may appear with any noun. In addition to their common use on regular NPs, and two of these demonstrative, the referential demonstratives, may also appear with pronouns. The demonstratives wi \(a\) and fue \(a\) show different degrees of distance from the speaker; there is no third component of deixis, common in many languages in Melanesia, that includes reference to the hearer's position (near or distant from hearer, as another dimension). Nor are there elevationally explicit demonstratives: there are no terms for 'up there' and 'down there', for instance. These demonstratives, as well as the discourse deictic ing \(a\), all contain the element \(a\), which also occurs on NPs without the more specific meanings associated with wi, fue, or ing. This general deictic \(a\) is simply a device used to flag the fact that the referent it is attached to is in some way 'given' and not a completely new element of the discourse. When combined with ing, as ing \(a\), the sense appears to be one similar to that associated with
definiteness in English or Indonesian. The combined form ing \(a\) is often used as a 'general purpose' demonstrative, superseding the more locationally-bound wi \(a\) and fue \(a\) when the referent is not visibly at a near or far location.

The demonstrative and pragmatic clitics are not restricted to appearing on words of any particular class as their hosts; in this they differ sharply from the pronominal clitics, which are strongly constrained to either verbal or nominal hosts (for proclitics and enclitics, respectively see chapter 6). The following sentences (as far as possible drawn from the texts included at the end of this book) illustrate the appearance of various demonstrative and pragmatic clitics on words of different classes (see chapter 5 for a discussion of the morphosyntactic grounds for establishing different word classes).

Noun:
\begin{tabular}{lll} 
nále-tong =pa, & pó-weng-tong=ra, & rángueke \(=p a\), \\
taro-shoots=INSTR & vegetable-gedi-shoots=also \\
'taro shoots, even gedi shoots, sweet potatoes,,. & &
\end{tabular}
ne=r-óe-róe líhi ri-rong=pa.

1PL=1PL-get.PL-RED garden tree-old=INSTR
'we get them (all) from the old garden.'
Possessed noun:
Kóeng-nìne=we=pí=rat
tooth-1SG.GEN=1SG.DAT=this=even=also
báng tue=ko ka break 3SG.F.do=OBV NEG
'And (my) teeth broke, they were no more.'
Kóeng-nì=ne=we(=ra) fèng, wì tají.
tooth-1SG.GEN=1SG.DAT=this=also bad shatter 'My teeth were ruined, they shattered.'

Adjective:
(50) fèng=ra \(k a\).
bad=only NEG
'there're not bad at all.'
móe hápa=ra te=r-í e ti.
fish little=also 3PL=3PL-get.PL 3PL.be 3PL.do
'they get little fish too.'
ya héfèng=ra te=ti ka,
thing good=also 3 PL=3PL.do NEG
'they don't do anything worthwhile, ...'
Verb:
\(N e=r-o e=r a n e\),
1PL=1PL-get.PL=also 1PL.go
'we get them, and then go, ...'
Medial verb:
... hòe te=t-ang=ko=ra ka.
sago \(3 \mathrm{PL}=3 \mathrm{PL}-\) eat \(=O B V=\) also NEG
'they all eat the sago, eat it till it's all gone.'

Pronominal clitic:
Nì=ra=lue \(\quad k a\).
1SG=also=hear NEG
'I don't know either.'
Free pronoun:
```

ne=Máwo ne=ra TeÓeti pí-tè ne=ti
1PL=Skou Mabo 1PL=also Wutung language-3PL.GEN 1PL=1PL.do
ne ti.
1PL.be 1PL.do
'we Mabos too can understand the Wutung language, ...'

```

Time adverbial:
\(F e=r a \quad t e=t e \quad\) báng \(=f u e\),
tomorrow=also 3 PL=3PL.go beach=that
'The next day they went to the beach as well, ...'
Numeral:
Te=ueme hingtung=ing \(t e=a\),
3PL=woman two=DEIC 3 PL=PROM
'And those two women, ...'
Negator:
\(y a-\) lilipa=ka=ra ka,
thing-all.things=NEG=also NEG
'there wasn't a shortage of things,
(literally 'a lack of all things, too, was not (present)')
Quantifier:
(60)
bépú fátà=we pe=r-úe pú mong-mong tue.
lay all=this 3SG.F=3SG.F-lay nest sit.F-RED 3SG.F.do
'she lays them all, and there they are.'
The remaining two demonstratives have quite different uses. The focus marker \(k a\) is used in exactly those circumstances that preclude the use of \(a\) : when the referent is new, unexpected, or in some other way surprising or unpredictable.

The verb \(i\) 'be at' functioning as a locative demonstrative is used purely postverbally to indicate pronominal reference to a location. It cannot be used in conjunction with a locative nominal in the same clause, as can be seen in the ungrammaticality of (62).

Ha nì=loe i.
bag 1SG=put.down be.at
'I put down the bag.'
* ha nì=loe fítong i.
bag 1SG=put.down ground, be.at
'I put the bag down on the ground.'
Ha nì=loe fítong.
bag 1SG=put.down ground
'I put the bag on the ground.'
(64) Hìoe \(n \grave{=}=a=l o e \quad l o e\).
pandanus \(1 \mathrm{SG}=\mathrm{PROM}=\) get.PL come
'I'll get the pandanus.'
(In Papuan Malay: ‘Buah merah saya yang angkat.')
This last sentence illustrates contrastive focus on the subject, even though both the subject and this focus are only overtly represented by clitics. More details of the behaviour or contrastive focus can be found in 4.3 and 4.9.

\subsection*{4.7.1 Demonstratives with pronouns}

In general the only deictics that can appear on pronouns are the pragmatic markers, but in addition to these the deictic \(=\) ing is also found, as in (65). Using a locative demonstrative, even where that would be semantically compatible, such as the use of the proximate demonstrative with a 1 SG pronoun in (67), is not acceptable, as can be seen in (66) - (67).

Mè=ing tata u-ké.
2SG=DEIC grandfather child-3SG.NF.GEN
'You (Jesus) are God's son.'
* pe=fue a pe=angku-nì=ne

3SG.F=that 3SG.F=child-1SG.GEN=1SG.DAT
'She there is my daughter.'
```

    * nì=wi a pe áli-pè=pe
    1SG=this 3SG.F father-3SG.F.GEN=3SG.F.DAT
    'I here am her father.'
    ```

More typical examples of pragmatic demonstratives appearing with pronouns include the following sentences. Note that when the sole exponent of the pronominal argument in the clause is the proclitic on the verb the pragmatic clitics will appear on this position, showing once again that the proclitics cannot be considered to be affixal in the same sense as the prefixes are, shown by the ungrammaticality of a clause with a pragmatic clitic intervening between the prefix and the verb root, seen in (69)' (and further described in the following section, 4.7.2).
\[
\begin{align*}
& \text { Mè=pí=ra àng mè=m-e-me lóe m-á p-oe. }  \tag{68}\\
& 2 \mathrm{SG}=\text { even=also dry.wood } 2 \mathrm{SG}=2 \text { SG-go-RED get.PL } 2 \text { SG-carry } 2 \text { SG-come } \\
& \text { 'You too have to go and collect some firewood.' }
\end{align*}
\]
\[
\begin{equation*}
\text { Kóe }=w e=\text { ing } a \quad k e=f a=k \text {-ang. } \tag{69}
\end{equation*}
\]
baked.sago=this=the 3SG.NF=just=3SG.NF-eat
'Just he ate that sago we were talking about.'
\(\overline{O R}\) 'He was the only one who ate that sago we were talking about.'
(69)' * kóe we ing a ke \(k=f a-a n g\)
\[
\begin{array}{ll}
\text { Ke=bà=ing a } \quad k e=p i ́=r a & k e=k a ́ .  \tag{70}\\
\text { 3SG.NF=person=the } 3 \text { 3SG.NF=even=also } & \text { 3SG.NF=hit } \\
\text { 'That guy hit him too.' } &
\end{array}
\]

One collocation involving a pronoun and a pragmatic clitic appears to be lexicalised. The 3SG.NF pronoun \(k e\) frequently appears with =ing a 'the', and the combination has acquired a sense similar to a distal demonstrative pronoun, 'that one'. Proof of the lexicalisation of this combination can be seen in the fact that it can be used to refer to feminine, as well as non-
feminine, nouns, as in (71), in which processed sago, hòe, is assigned feminine gender, as is morphologically evidenced by the choice of the \(u\) vowel in fue 'see' (see 7.2.3).
\[
\begin{array}{lllll}
\text { Ke=ing a } & \text { hòe } & p e=\text { tue=ing } a, & m e ̀=f u, & k a ?  \tag{71}\\
\text { 3SG.NF=the } & \text { sago } & \text { 3SG.F=3SG.F.do=the } & \text { 2SG=see.F } & \text { NEG } \\
\text { 'That is the sago she made, you can see it, can't you?' } &
\end{array}
\]

In this example pe tue ing a functions as a relative clause modifying hòe.

\subsection*{4.7.2 Demonstratives with proclitic agreement}

Deictic clitics may appear on the proclitic agreement markers that are attached to a verb. This means that they form a single grammatical word with the verb, though prosodically they are not necessarily one unit. In the example below =wò, for instance, appears with its own HL tone melody.
```

$N \bar{l}=r a=w o ̀=f a=r e$.
$1 \mathrm{SG}=\mathrm{also}=\mathrm{EMPH}=\mathrm{just}=\mathrm{go}$
'I went by myself.'

```

Since the verb is itself without any tonal associations, the fact that the clitics form a prosodic word separate from the verb root is not immediately apparent, though it is distinct from the pronominal clitic, which also carries a HL melody. Similarly, in an example like (73), in which the clitics, both pronominal and pragmatic, do not carry their own tone, and neither does the verb, there is no striking evidence of the existence of multiple prosodic words.
\[
\begin{align*}
& \text { Pe=a=te. }  \tag{73}\\
& \text { 3SG.F=PROM=3SG.F.go } \\
& \text { 'She went.' }
\end{align*}
\]

The prosodic independence of various parts of the same grammatical word can be demonstrated dramatically, however, with an example such as the following, in which one grammatical word, segmentally [mepipi.], shows three tonal melodies, HL, H and HL, respectively, yielding a pitch contour of \([\backslash-\backslash]\) on the single syntactic word (as judged by tests for word status within the clause - see 5.1) mepipa/.
(74) \(K e \quad m e ̀=p i ́=p-a ̀\).

3SG.NF 2SG=even=2SG-help
'Even you helped him.'
The use of clitics with pronouns, free or bound, is thus not problematic. When demonstrative or pragmatic clitics appear with pronominal markers of possession we find a more complicated state of affairs, described in the following section.

\subsection*{4.7.3 Demonstratives with possession}

Deictic clitics can be found on nouns that are also marked for possession, and in these environments we can see the basis for the division in table xx82 between the pragmatic clitics and the referential and locative clitics. The deictic marker is found inside the marking for possession if it is a pragmatic marker, but is outside the possession if it is a locative clitic, showing that there are two separate positions in the word template for these two classes of clitics. The referential clitics can occur in either position.

In (75) and (76) we can see that the only position in which =ra can occur is inside the genitive and dative marking; placing this same clitic outside these morphemes results in ungrammaticality.
```

Pá=ra-nì=ne (fèng).
house=also=1SG.GEN=1SG.DAT bad
'My house too (is in bad condition).'

```
* pá-nì=ne=ra

On the other hand a locative clitic such as =fue (a) can only appear following all possessive clitics.

Pá-nì=ne=fue a
house=1SG.GEN=1SG.DAT=that
'That house of mine.'

> * pá=fue (a)-nì=ne

Despite these clear grammatically distinct positions, the referential clitics are free in their positioning, as seen in the equal grammaticality of both (79) and (80).

Pá=ing-nì=ne.
house=DEIC=1SG. GEN=1SG.DAT
'My house.'
Pá-nì=ne=ing.
house-1SG. GEN=1SG.DAT=DEIC
'My house.'
While the referential clitics are free in terms of position, there are preferences. If a referential clitic occurs in the same noun phrase as a pragmatic or locative clitic on a noun marked for possession, there is a strong tendency for the referential clitic to appear away from the other clitic. Taking the case of a pragmatic clitic and a referential clitic to start with, while both (81) and (82) are grammatical, (82) is judged as not sounding as good as (81), and was only produced with reluctance. \({ }^{35}\)
(81) \(\quad P a ́=r a=n i ̀=n e=i n g\).
house \(=\) also=1SG.GEN=1SG.DAT=DEIC
'My house too.'
(82) ?/\# Pá=ra=ing-nì=ne.
house=also=DEIC=1SG. GEN=1SG.DAT
'My house too.'
Turning now to combinations of referential and locational clitics, we find that the judgements are more mixed. The most preferred pattern (other than having but a single clitic on the NP) is for the two clitics to occur on opposite sides of the possessive cluster. Failing that it is tolerated to have both clitics outside the possessive marking, but judged to sound somewhat odd.

\footnotetext{
35 The reaction of informants was reminiscent of the famous 'You could say it that way, sure. We wouldn't. But we won't mind if you do.' quote, loosely attributed to Sandy Chung.
}
(83) \(P a ́=i n g-n i ̀=n e=f u e ~ a . ~\)
house=DEIC=1SG.GEN=1SG.DAT=that
'That house of mine.'
(84) \# Pá-nì=ne=ing=fue \(a\).
house-1SG.GEN=1SG.DAT=DEIC=that
'That house of mine.'
When the NP contains a modifying adjective these alignment issues disappear, as the possessive marking is bound to the noun, while the clitic marking applies to the NP as a whole, and so must appear hosted by the post-nominal adjective. The combination of these two facts about morphological position yields the following phrases.

Noun, possession, adjective and pragmatic clitic
\(\begin{array}{ll}\text { Pá-nì=ne } & \text { máki=ra. } \\ \text { house=1SG.GEN=1 SG.DAT } & \text { big=also }\end{array}\)
'My big house too.'
(86) * pá-nì=ne=ra máki
(87) * pá=ra=nì=ne máki

Noun, possession, adjective and locational clitic
\(\begin{array}{ll}\text { Pá-nì=ne } & \text { máki=fue a } . \\ \text { house }=1 \text { SG. GEN=1SG.DAT } & \text { big=that } \\ \text { 'That big house of mine.' } & \end{array}\)
(89) * pá-nì=ne=fue a máki36

Noun, possession, adjective and referential clitic
(90) Pá-nì=ne máki=ing a.
house=1SG.GEN=1SG.DAT big=the
'The big house of mine.'
(91) * pá-nì=ne=ing a máki
(92) * pá=ing \((a)=n i ̀=n e ~ m a ́ k i ~\)

Noun, possession and adjective with both pragmatic and locational clitics
\[
\begin{align*}
& \text { Pá-nì=ne máki=ra=fue a. }  \tag{93}\\
& \text { house=1SG.GEN=1SG.DAT , big=also=the } \\
& \text { 'That big house of mine too.' }
\end{align*}
\]
(94) * pá-nì=ne=ra máki=fue a
(95) * pá-nì=ne=ra=fue a máki
(96) * pá=ra=ni=ne=fue a máki
(97) * pá=ra=nì=ne máki=fue a

From these examples we can see that the clitics are primarily constrained to appear NPfinally; that is, the clitics are attached at the level of the NP node, not to individual words. Of course they must be hosted by a particular word, and here the conditions on relative ordering

\footnotetext{
36 This string of morphemes is grammatical with a clausal, not phrasal, interpretation (and appropriate intonation), as 'That big house of mine, (it's) big.'
}
with respect to possessive marking apply, coming in to play only when the word to which the clitics attach is marked with genitive and dative morphemes.

The focus clitic \(=k a\) conforms to the principles described above for positioning within the NP, but additionally has other constraints on its appearance. Because there is no clause-external focus position in Skou, it can only appear clause internally.




(100) Tang-nì=ne=ka mè=fu ná?
canoe-1SG.GEN=1SG.DAT=FOC 2 SG=see. F Y/N
'Have you seen my canoe.'
(101) Palé=fue a \(k u=k a \quad k e=k\)-ang.
pig=that \(\quad\) egg=FOC \(\quad 3\) SG.NF \(=3\) SG.NF-eat
'That pig ate an egg.'
This is not a special clause-external structural position, as can be seen by the following example, in which a time expression appears preceding the focussed NP.
(102) Bàng páng-pe-pè=pe=ka
yesterday husband-3SG.F.DAT-3SG.F.GEN=3SG.F.DAT=FOC
púru ke=ká.
white.tree.kangaroo 3SG.NF=hit
'Yesterday her husband was the one who shot a tree kangaroo.'
Further discussion on the phrase-structural implications of focussing can be found in 4.3.

\subsection*{4.7.4 Emphatic marker}

The emphatic marker =wò appears in a variety of constructions, from some purely pragmatic functions, to some cases where it is required by a particular syntactic construction. In addition to the morphological survey presented here, details on the use of \(=w o\) in different constructions can be found in 13.4.

One syntactically interesting function of the emphatic marker is to shift the scope of an oblique argument by restricting it to refer to the subject of the clause in which it appears, much as the reflexive may be used in English. The following sentence shows that the subject of the controlling clause is interpreted as the beneficiary of the action of the subordinate clause.
(103) Theo \(k u-n i ̀=n e \quad k e=l o ́ e n g=k o \quad t e=T a ́ n g ~ h o ̀ e-t e ̀ ~\)

Theo child-1SG.GEN=1SG.DAT 3SG.NF=tell=OBV 3PL=bird sago-3PL.GEN
\begin{tabular}{|c|c|c|}
\hline yata & \(k e=l i=k o\) & \(k e=k e\). \\
\hline transact & 3SG.NF=do=OBV & 3SG.NF=3SG.NF.DAT \\
\hline Theoi to & my child \({ }_{j}\) to buy & some rice for \(\mathrm{him}_{\mathrm{i}}\) \\
\hline
\end{tabular}

When the emphatic clitic is added to the beneficiary, then the scope can only be interpreted as applying to the subject of the clause 'My child buys some rice.'
(104) Theo \(k e=\) lóeng=ko \(k u-n i ̀=n e \quad t e=T a ́ n g ~ h o ̀ e-t e ̀ ~\)

Theo 3SG.NF=tell=OBV child-1SG.GEN=1SG.DAT 3PL=bird sago-3PL.GEN
yata \(k e=l i=k o \quad k e=k e\).
transact 3SG.NF=do=OBV 3SG.NF=3SG.NF.DAT
'Theo \({ }_{i}\) told my child \({ }_{j}\) to buy some rice for \(\mathrm{him}_{\mathrm{i}} / * \mathrm{j} /\) ? \(* \mathrm{k}\).'
The appearance of 'my child' in the embedded clause or as object of the controlling clause does not affect the interpretation of the scope of the pseudo-reflexive.
(105) Theo ku-nì=ne ke=lóeng=ko te=Táng hòe-tè

Theo child-1SG.gEN=1SG.DAT 3SG.NF=tell=OBV 3PL=bird sago-3PL.GEN
\(\begin{array}{lll}\text { yata } & k e=l i=k o & k e=k e=w o ̀ . \\ \text { transact } & 3 S G . N F=\mathrm{do}=\mathrm{OBV} & \text { 3SG.NF=3SG.NF.DAT=EMPH } \\ \text { 'Theo }{ }_{\mathrm{i}} \text { told my child } \mathrm{j} \text { to buy some rice for himself } *_{\mathrm{i}} / \mathrm{j} / * \mathrm{k} .\end{array}\)
The emphatic marker is usually encountered on its own in this construction, but in its other uses it is often found in combination with other markers of pragmatic salience. This is discussed in 4.9.

The other salient uses of the emphatic marker, in the reflexive construction and marking a comparative or superlative degree on an adjective, are discussed in 13.4 and 17.4 respectively.

Bá=moe \(\quad k\)-atà \(\quad i \quad l i ?\)
who=return 3SG.NF-walk running be do
'Who's running this way?'
(see 6.3.3.1 for a discussion of the unusual agreement pattern on moe here)
(107) \(K u\)-nì=ne=wò moe-k-a tà il \(\quad\) i.
child-1SG.GEN=1SG.DAT=EMPH return-3SG.NF-walk running be do 'My child's the one who's running over here.'
(108) Nì nalélang=ing nì=li=ko, nì=wò k-ang-kang li.

1 SG taro lang=DEIC \(1 \mathrm{SG}=\mathrm{do}=\mathrm{OBV} \quad 1 \mathrm{SG}=\mathrm{EMPH}\) 1SG-eat-RED do
'I made this taro lang, and I will eat it.'
This is the same =wò that appears emphatically with nouns (see 4.7), and which can be used in the reflexive construction (see 13.4).

\subsection*{4.8 Direction}

The orientation towards which a motion is directed is a salient category in Skou, expressed by the use of specific directional motion verbs and, less commonly, in a series of directional nouns. The categories that are relevant include an east-west axis, and a seawards-landwards axis, which, given the geographical location of the Skou villages corresponds to north-south
quite closely. The following motion verbs include an element of direction in their semantic specification:

Table 83. Directional verbs
\begin{tabular}{ll}
\hline \hline Orientation & \(=\) \\
\hline 'westwards' & hí \\
'eastwards' & \(e\) \\
'northwards, seawards' & \(o\) \\
'southwards, landwards' & hoe \\
\hline \hline
\end{tabular}

While direction is salient, orientation or location is not so important. The motion verbs listed in table 83 xx are frequently employed in discourse, but there are no corresponding locational markers that differentiate location in different directions with respect to the speaker, or at different heights.

The verb hí 'go westwards' in table 83 xx is identical in form and in inflection to the verb hí 'descend, go downwards', showing the very general (in eastern Indonesia and New Guinea, at least) equation of westward direction with a lower elevation. It would make iconic sense for us to equate \(e\) 'go eastwards' with \(e\) 'ascend, go up, board', but these verbs are in fact not identical. Their roots are homophonous, but they inflect in different ways (see appendix 2), showing that, no matter how compelling the historical reasons for considering them to be related both in terms of form and semantic function, and in terms of fitting into the 'system' of spatial and elevational deixis, they are synchronically quite distinct verbs. This is a recurrent theme in the verbal lexicon of Skou, the minimal differentiation of two or more semantically related verbs.

\subsection*{4.9 Other marking of focus}

In addition to the use of the dedicated pragmatic deictic clitics described in 4.7, there are other grammatical means which can be used to mark pragmatic focus in Skou. Pragmatically highlighted arguments are often coded in appositional NPs. In the following example (taken from the text Tangí, lines 21-24) we can see how there are three independent NPs, the last marked with two pragmatic deictic clitics, referring to the same two women. They are first mentioned as te ueme hingtung 'the two women', then their names are mentioned, Tóe tena Háue 'Tóe and Háue' and finally they are referred to with a pronoun, tena pí a, 'those two'.


As can be seen in this extract, more than one marker of pragmatic prominence may appear on a given nominal (we have already seen examples of this in 3.1.1). The sequences that have been observed in naturally-occurring speech are shown in table 84xx.

Table 84. Attested sequences of pragmatic markers
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multicolumn{7}{|l|}{=we \(\quad=r a\)} \\
\hline =we & & & & & & = ing \(a\) \\
\hline =we & & & & \(=p i\) & \(=a\) & \\
\hline = ing & & & & & \(=a\) & \\
\hline = ing & & & & \(=p i ́\) & & \\
\hline = ing \(a\) & & & & \(=p i ́\) & \(=r a\) & \\
\hline \multirow[t]{13}{*}{=fue} & & & & & & = ing \(a\) \\
\hline & \(=r a\) & \(=w o ̀\) & & & & \\
\hline & \(=r a\) & \(=w \grave{O}\) & \(=f a\) & & & \\
\hline & =ra & & \(=f a\) & & & \\
\hline & \(=r a\) & & & & & = ing \(a\) \\
\hline & \(=r a\) & \(=w o ̀\) & \(=f a\) & & & = ing \(a\) \\
\hline & & \(=w o ̀\) & & & \(=r a\) & \\
\hline & & & \(=f a\) & \(=p i ́\) & & \\
\hline & & & \(=f a\) & & \(=r a\) & \\
\hline & & & \(=f a\) & & & = ing \\
\hline & & & \(=f a\) & & & =wi \(a\) \\
\hline & & & & \(=p i ́\) & \(=r a\) & \\
\hline & & & & \(=p i ́\) & \(=a\) & \\
\hline
\end{tabular}

We can clearly see that the locative demonstratives 'bracket' the pragmatic markers, when they appear in sequence, appearing either at the beginning or the end of the string. Furthermore, the clitic \(=r a\) 'also' is the most peripheral of the pragmatic clitics, also being able to appear either towards the front or towards the back of the string. Inside this is a tightly-ordered set, wò fa pí, that must appear in this relative order.

It is at least equally instructive to examine which sequences are not found. The following table shows the negative information that is the other side of table 83xx.

Table 85. Generalised template for the pragmatic markers
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline NP & = DEM & =also & =EMPH & =only & =even & \[
\begin{aligned}
& =\text { also, } \\
& =\mathrm{PROM}
\end{aligned}
\] & =DEM \\
\hline & \[
\begin{aligned}
& =w e,=\text { ing } a, \\
& =\text { fue }
\end{aligned}
\] & \[
=r a
\] & \[
=w o ̀
\] & \[
=f a
\] & \[
=p i ́
\] & \(=r a\) & \[
\begin{aligned}
& =\text { ing } a, \\
& =\text { wi } a
\end{aligned}
\] \\
\hline
\end{tabular}

In terms of their constituent positions, we can justify the following model. In the case of the daughters of D' and of "rest-bar" only one branch is allowed: there can be either a left- or a right-headed node at each level, but not a head that is surrounded by modifiers. Distinctions between the levels can easily be found: the lowest level contains the only tone-bearing morphemes, =wò and =pí, and is the only level which shows no variation in position.
(110)


If the nodes in this tree (or, alternatively, the template seen in table 85 xxx ) was fully productive, then we should expect more forms than are actually attested. Ignoring the spurious (such as =ra=ra 'also also'), the combinations shown in table 86xxx are those that we would also predict, but which are not found.

Table 86. Predicted, but non-attested sequences of pragmatic markers
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline NP & DEM: & & & & & \\
\hline - & = we & & \(=w o ̀\) & & & \\
\hline (P) & = we & & & \(=f a\) & & \\
\hline (P) & & \(=r a\) & & \(=f a\) & & \\
\hline (P) & & \(=r a\) & & & \(=p i ́\) & \\
\hline (P) & & & \(=w o ̀\) & & \(=p i ́\) & \\
\hline - & & & \(=w o ̀\) & & & =wi \(a\) \\
\hline (P) & & & & & \(=p i ́\) & = ing \(a\) \\
\hline (P) & & & & & = pí & =wi \(a\) \\
\hline & 'this' & 'also' & (EMPH) & 'only' & 'even' & 'this, the' \\
\hline
\end{tabular}

Not all of these 'missing' combinations have the same status. Those marked as ' \(>\) ' are combinations which are not attested, and for which the reverse ordering is also impossible. Neither of \(=\mathrm{DEM}=\mathrm{EMPH}\) or \(=\mathrm{EMPH}=\mathrm{DEM}\) are found, with the sole exception of one instance of \(=r a=w o ̀=f a=i n g a\), occurring on a pronoun; there are no instances of =we=wò / =wi \(a=w o ̀ ~ o r ~\) \(=w \grave{o}=w e /=w \grave{o}=w i a\). This appears to be a genuine gap in the data, and one that needs some explaining.

Similarly, =wò=pí '=EMPH=even' is not attested, and there is not a (templatic) possibility of =even=EMPH. The explanation might be phonological, not allowing the sequence of HL and \(H\) in the same phonological word.

The other apparent gaps, marked by ( P ), are instances of positioning, rather than semantic incompatibility. For instance, while \(=r a=f a '=a l s o=o n l y '\) is not attested, \(=f a=r a '=o n l y=a l s o '\) is. There can be no semantic constraint again the \(=r a=f a\) order, but rather there appears to be an ordering constraint on these two morphemes. This applies to the other combinations marked as ( P ) in the table: the opposition order is attested, but the relative positions shown in table xx86xx are not. From this information we can construction a positional hierarchy, as seen in (111), reflecting the preference for certain clitics to display an alignment close to the noun.

Left alignment and clitic ordering
\[
\begin{equation*}
\{=r a \gg=f a,=w e »=f a\},=r a \gg=p i ́,=p i ́ »=\mathrm{DEM} \tag{111}
\end{equation*}
\]

While clitic ordering constraints are not unusual, what is remarkable here is that we have only four relative orderings that seem to be relevant; other combinations, such as \(=r a\) and \(=w o ̀\), can occur in either order, without restriction: both \(=r a=w o ̀ ~ a n d ~=w o ̀=r a\) are attested, though \(=r a=w o ̀ ~ i s ~ m o r e ~ f r e q u e n t, ~ a n d ~ t e n d s ~ t o ~ o c c u r ~ w i t h ~ b o t h ~ t r a n s i t i v e ~ a n d ~ i n t r a n s i t i v e ~ s u b j e c t s, ~\) while \(=w o ̀=r a\) has only been attested with intransitive subjects in non-elicited data. The following textual examples illustrate these two possible orderings.

\begin{tabular}{|c|c|c|c|c|}
\hline Te=ueme & hingtung=ing & \(t e=a\), & \(t e=r a=w o ̀\) & \(t e=m e\) \\
\hline \(3 \mathrm{PL}=\) woman & two=DEIC & 3PL=PROM & \(3 \mathrm{PL}=\mathrm{also}=\mathrm{EMPH}\) & 3PL=return.PL \\
\hline 'And those two & women, th & returned, & & 3p-return.rl \\
\hline
\end{tabular}
te te=meng pa-rong fue te=ti e.
3PL 3PL=sit.PL river-bank cry 3PL=3pL.do 3PL.be 'and sat on the bank of a river and cried.'

```

...te=ra=wò, te=r-í=pa ya,
3PL=only=EMPH 3PL=3PL-get.PL=INSTR thing
'that lot, they took it, and, whatsit, ...'

```
            te=t-ang \(\quad e \quad t i=p a\)
            3PL=3PL-eat 3 PL.be \(\quad 3\) PL.do \(=\) INSTR
            'they ate it, and ...'
\(=w o ̀=r a\) on an intransitive subject (from the text Te Táng)
Bí=ra te=pang=ko ka, hòe=wò=ra,
flooring=also \(3 \mathrm{PL}=\) chop. \(\mathrm{PL}=\mathrm{OBV}\) NEG sago=EMPH=also
'The trees we use for flooring, too, they've chopped them all down, and even the sago stands...'
```

te=pang=ko ka,
3PL=chop.PL=OBV NEG
'they're all gone, ...'

```

A more detailed investigation into the behaviour of the clitics is required, examining their appearance with different arguments and in different orders. Problematically, under elicitation most combinations, on most arguments, are deemed acceptable, and so real investigation must be based on a larger corpus of texts. At the present time only the collection given in this book as appendix 4 is available in easily usable form, and so they will have to serve as the basis for any more detailed examination of the clitics.

\subsection*{4.10 Topic}

As with all languages the notion of topic plays a salient part in Skou sentence and text structure. We have already seen data on basic topicalisation in 4.2 , and here shall continue with a discussion of sentences with more than one topical element, or unusual topicalisation.

\subsection*{4.10.1 Multiple topics}

There are cases of what seem to be two topics on the one clause. The status of the nominals in this construction can be diagnosed by the fact that both a non-subject and a subject appear sentence-initially. Examine the following textual example:

Topic 1 : protagonist Topic \({ }_{2}\) : setting
(115) \(N e=\) Máwo, \(\quad\) Te Tángpe, ne ne ti...

1PL=Skou Mabo Skou Yambe 1PL=1PL.go 1PL.be 1PL.do
'We Mabos, (to) Skou Yambe, we'd go there ...'
In this example the goal Te Tángpe would normally appear postverbally, as in (115)', the normal position for oblique arguments.
(115)' Ne Máwo ne ne Te Tángpe ne ti.

The only means by which a goal may appear preverbally is by topicalisation, which we would expect to result in the clause in (115)":
(115)" [topic Te Tángpe ], ne Máwo ne ne ne ti.

This would be an example of a normal clause with a single topicalised argument, the goal. The actual textual sentence in (115), however, while presenting the goal in a preverbal position nonetheless has the subject preceding the goal. Assuming that this is not simply a case of a false start (which does not, based on the intonation heard on the sentence, seem to be the case), we have two possible analyses for this sentence, shown below. In the first analysis the goal is simply preposed to a preverbal, but not pre-clausal, position. This is modelled in (116).
(116) Putative analysis of (115): I


In the second analysis there are two topicalised constituents, the goal NP, and additionally the subject NP as well.
(117) Putative analysis of (115): II


Since there is no evidence from other constructions that would lead us to posit a topical preverbal, but yet clause-internal position as seen in (116), and since there are clear topic-like intonation cues for the separateness of both the subject ne Máwo and the goal Te Tángpe in (115) from the verbal remainder of the predicate, the analysis in (117) is favoured here. Further support for this position comes from the position of time expressions: non-topicalised and noncontrastive time expressions must follow all the topics; that is, they occur clause-initially, as in (118).
(118) Hòe, ne=bà-moe, ung a fitong hápa. sago 1PL=person-Papua now land small 'As for sago, us Papuans, now we have only a small amount of land (to grow it on).'

The structure of (118) parallels that shown in (115), with ung a serving to delimit the left edge of the clause, giving evidence that the clause-internal topic analysis shown in (116) must be considered false.

\subsection*{4.10.2 'Extra-sentential' topics}

While most topics appear in structures of the kind seen in (117), outside the nuclear clause but inside the boundaries of the sentence, there are also cases of clearly topical elements that are better analysed as being in a completely separate sentence. These structures consist of firstly a simple presentative clause indicating the topic, and then a clause with a comment on that new topic. Other structures have explicit marking that in other contexts shows separate clausal status.

An example of a possible extra-sentential topic is shown in the following lines from text 20 in the appendices. The separate lines mark distinct intonation breaks.
a. Ing a te=ueme hìngtung Tóe tena Нáue, the 3PL=woman two Tóe 3DU/GDR Háue 'And because of that the two women, Tóe and Háue, ...'
b. tena=pí=a,

3DU/GDR=even=PROM
'those two, ...'
c. \(t e=t e\),

3PL=3pL.go
'they went, ...'
d. tilong te=nà pe=jí toe, doorway 3PL=open 3SG.F=open 3.come 'and they opened the door, ...'

It is possible that the first two lines of this example, (119)a and (119)b, are instances of multiple topic reference to the same participant, as in (119)'.
(119)'


This sort of structure, with multiple topical reference to the same participant, would also account for sentences such as (120), which shows the opposite trend in terms of NP complexity
to that shown in (119). In (119) the first topical NP (te=ueme hìngtung Tóe tena Háue) is considerably more complex than the second, a modified pronoun tena=pi=a. In (120), on the other hand, we can see that the size of the NP increases: \(n \grave{l}>n e=b a ̀>k u\) [Patipeme] ne.

b. \(n e=b a ̀\),

1PL=person
'all of us, ...'
c. \(k u\) [Patipeme] \(n e\), child [Patipeme] 1PL 'us Patipeme clan descendants, ...'
d. ápólè-ha ne=n-ang ka.
tulip-leaf 1PL=1PL-eat NEG 'we can't eat tulip leaves.'

Again, though, we must consider whether a closer translation of (120) might not be that shown in (120)', with a presentative first clause, followed by a clause with multiple-topics. Of course, other possibilities are also sensible, one of which is shown in (120)". Here we can posit two clauses, one with the nominal 'Patipeme clan descendants', and a new clause with the subject 'we'; this is in contrast to the version shown in (120)', in which 'Patipeme clan descendants' is part of an appositional NP headed by 'we'.
\((120)\) ' 'So then there's me. All of us, us Patipeme clan descendants: we can't eat tulip leaves.'
(120)" 'And, well, me, there's all of us. Us Patipeme clan descendants, we can't eat tulip leaves.'

While these sentences are ambiguous, the following sentence explicitly marks the apparent topic with \(=p a\), the instrumental marker that is used to show same reference (in time or in terms of subject - see 19.5). In (121) both intonation units appear with tóe and an instrumental marker. It appears that we have strong grounds for considering tóe to be a separate clause entirely; a possible alternative translation is given in (121)'. This takes tóe \(=p a\) to be a presentative, or topic introducing, clause of its own, linked to the main clause by the 'same reference' marker \(=p a\), not the obviative \(=k o\). .
a. Tóe=pa ya-lilipa \(k a \quad m e\), beads=INSTR thing-all.things NEG return.PL
'The beads, those things aren't (here) any more, they've gone back, ...'
b. tóe \(=p a \quad\) héfèng \(k e=l o e \quad k a \quad\) moe.
beads \(=\) INSTR good 3 SG.NF=get.PL NEG return
'and the beads, the good ones, he took them all (so there aren't any more when he) went back.'
(121)' 'And there are the beads. There aren't any things (here any more), they've gone back. There were the beads. The good ones, he he took them all (so there aren't any more when he) went back.'

This could, of course, reflect a further aspect of the multifunctionality of \(=p a\), which is attested marking instruments, coordination of NP, and same-reference coordination of sentences, as well as a non-productive use on many lexical adverbs. If it has developed another function, that of marking topics, this would not be completely surprising.

\subsection*{4.11 Summary of pragmatic coding strategies}

As in all languages, the coding of pragmatic information plays an important role in the formation of sentence structures in Skou. There is little morphology uniquely associated with pragmatic functions outside the preferential use of the pragmatic clitics described in 4.7, but there is a special pre-clausal position which is strongly associated with topics. Furthermore, there is a strong possibility that the instrumental marker \(=p a\) has been reanalysed as a topic marker. There is ample evidence of multiple topics occurring in the same sentence, sometime being multiple reference to the same participant, giving an NP-level approximation of the multiple marking of subjects on verbs, or of possessors on nouns.

\section*{5 Word classes and clause types}

While the division of the lexicon into different word classes, as assessed by morphosyntactic criteria involving distribution and co-occurrence restrictions, is a (near-?) universal property of languages, the criteria for those divisions, the make-up of those divisions, and indeed the nature of those divisions varies from on language to the next. This chapter sets out the languageinternal evidence in Skou for different lexical classes.

\subsection*{5.1 The notion of 'word' in Skou}

Before we discuss different categories of words in Skou, we need to consider the term 'word' itself. The word in Skou may be defined primarily as the domain of the realisation of wordtone, using an implicit phonological criterion. This is not, however, always entirely congruous with the definitions that we would arrive at if we examined morphological or syntactic criteria. The different criteria that turn out to be relevant to a discussion of the boundaries of the notion of 'word' are the following (presented alphabetically):
- orthographic preferences.
- phonological range: the domain of the spread of tone melodies;
- possessive marking and its influence on the phonological and orthographic behaviour of 'words';
- syntactic behaviour: pragmatic variation, substitutability;

Phonologically, the best definition of the word comes from an examination of the domain of tonal prosody. Since tone in Skou is not syllable-based (see 2.3.1), but rather the same number of pitch contour distinctions are found regardless of the number of syllables, the domain of tonal spread is an effective tool for gauging the length of the word. Other phonological criteria are not so useful, since they are either syllable based (the constraint against nasalisation on \(\#\), for instance) or non-contrastive: there are no restrictions on word-final versus word-initial vowels, and no word-final consonants that might be used to define the likely possible ends of words.

Data describing the domain of tonal spread does not entirely agree with the definition of word that we would arrive at by looking at syntactic behaviour, and it is primarily in the area of possessive marking on nouns that the two criteria diverge. This is described in 2.3.1.9.

Syntactically we find that the usual criteria of substitutability, alternative positions in pragmatically distinct contexts, and replaceability apply to Skou as they do to most (all?) languages. The marking of possession, however (see 6.3.1, 9.1), presents challenges. The possessive in indicated by a combination of the genitive and the dative pronominal morphemes following the nominal root. These form a syntactically indivisible unit with the noun root.

Compare the following phrases, which show the difference between possessive marking of nouns and deictic marking of nouns. Here we can see that deictics, which are marked by clitics, do not form a syntactic unit with the noun, since a modifying adjective will intervene between the noun and the deictic. On the other hand possessive marking cannot be realised separately from the noun.

Position of demonstratives with respect to N -modifying adjectives
```

naké=ing a

```
dog=the
'the dog'
* naké ing a hápa

Position of possessive marking with respect to N -modifying adjectives
(4)
naké-ké=ke
dog-3SG.NF.GEN=3SG.NF.DAT
'his dog'
naké-ké=ke hapa
dog-3SG.NF.GEN=3SG.NF.DAT small
'his small dog'
(6) * naké hapa ké ke

Two tone contours are not found in complex words consisting of two independently attested morphemes (with the exception of words with possessive marking such as those above - see below). An example of this can be seen when we combine the root tàng 'blade', with a HL tone, with rúe 'handle', which has a H melody. The compound, tángrúe 'handle of a machete', displays only the H tone of the final element of the compound, and does not show any evidence that there was a falling HL melody once associated with the first syllable: it is phonetically indistinguishable from monomorphemic disyllabic words with a H melody, such as tánglé 'fishing spear'.

With possessive marking, however, it is clear that two tonal melodies can be found on the one syntactic word. Since the genitive suffixes always have a HL melody associated with them (the sole exception being the 3SG.NF form, which has a H melody), and since they do not form independent words, the addition of genitive marking to a nominal with a tone melody assigned to it creates a single word, morphosyntactically, which is the domain of two tone melodies, a criterion that otherwise identifies (phonological) words.

\subsection*{5.1.2 Clitics functioning 'independently' of a host}

There are some cases in which what has been and is described here as bound morphology appears to behave independently, in that there is no obvious syntactic host. Examples of these sort of cases can be seen in (8) and (9), in which the possessive marking sequence [nine] [|\_] 'mine' has the same form as would be expected from the two bound morphemes -nì '1SG. GEN' and \(=n e\) '1SG.DAT', which when used together mark 'my' in a phrasal possession construction,
as in (7), where these morphemes appear bound onto the nominal móe 'fish', in a 'wellbehaved' NP construction. In (7) and (8), on the other hand, the putative clitic+suffix combination appears without any nominal host.

Móe-nì=ne
fish-1SG.GEN=1SG.DAT
'my fish'
Pá=fue a \(\quad n i ̀=n e\).
house=that \(\quad 1 \mathrm{SG}=1 \mathrm{SG}\). DAT
'That house is mine.'
(9) Móe \(p e=w-a ́ \quad n i ̀=n e\).
fish 3SG.F=3SG.F-fry 1SG=1SG.DAT
'She fried some fish for me.'
The apparent quandary of a sequence of bound morphemes appearing without any host could be resolved by considering the fact that phonologically the genitive+dative combination is a separate word (see 5.1.2), in terms of being a separate domain for the purposes of association for tonal melodies. We might argue that, despite being part of a syntactic unit quite distinct from the NP pá fue a the nì=ne is phonologically attached to it, but bears a different tone (we have already seen that the prosodic definition of word and the word as defined by domains of tone melody association are different entities - see 2.3.2.2). This is shown for Móe pe wá nì ne in (9)'

Putative word boundaries for (9)
(9)'


This data would ignore examples such as (10), in which a plural or third person beneficiary (or possessor) shows us that rather than being a genitive+dative combination, what we have is a free pronoun+dative. The genitive pronouns are all associated with a HL melody (except for the 3SG.NF) - see 6.3 - and so appear with falling pitch. Of the free pronouns, only the 1 SG and 2SG have falling pitch. This means that for 1SG and 2SG beneficiaries the free pronoun+dative sequence would be predicted to have the same form as the genitive pronoun+dative. When we examine (10), with a 3PL beneficiary, we can see that there is no falling pitch, only the low pitch that is associated with the free pronoun. Pronouncing the sentence with a falling pitch associated with the first \(t e\) is ungrammatical, as shown in (10)'.

Móe \(p e=w-a ́ \quad t e=t e\).
fish 3SG.F=3SG.F-fry 3PL=3PL.DAT
'She fried some fish for them.'
(10)' * móe pe=w-á tè=te
fish 3SG.F=3SG.F-fry 3PL.GEN=3PL.DAT
Similarly, clausal possession such as (8) does not involve a genitive pronoun, as shown by the version in (8)' with a 3PL possessor. Pronouncing the possessive cluster with a falling pitch on the first syllable is not grammatical for any other than first or second person singular possessors; this is a strong indicator that they are not genitive, but simply basic, pronouns.
(8)' \(\quad\) Pá=fue a \(\quad t e=t e\).
house=that \(\quad 3\) PL=3PL.DAT
'That house is theirs.'
(8)" * pá=fue a tè=te
house=that 3PL.GEN=3PL.DAT
In short, there are no functions of affix+clitic sequences as independent words, but rather instances of free pronouns with clitics appear to be cases of this when they involve first or second person singular referents.

\subsection*{5.2 Kinds of words: syntactic categories}

We can recognise the open categories of noun, verb, adjective and adverb; the closed functional categories of demonstrative and postposition can also be established. The open categories also show subclasses, as follows:
noun common nouns; inalienable nouns.
pronouns a closed class of fourteen free forms, and four paradigms of bound forms (in addition to fused prefixes, historically derived from pronouns - Donohue 2002b), described in chapter 6.
verb simple verbs;
complex verbs (serial verb constructions and verbal collocations).
(In addition to these parameters, verbs can also be divided into morphosyntactically-arranged inflection classes depending on the amount and type of inflection they display, or into classes according to the number and kind of arguments they take.)
adjective common property.
adverb apparently fossilised adjective+suffix units.
numerals a closed class consisting of 9 roots that combine in limited and somewhat idiosyncratic ways, and the lexical item nawò 'many, all'.
quantifier the quantifier fátà 'all', which shows unique syntactic properties, despite its semantic overlap with nawo.
We can investigate the syntactic categories of the language according to the criteria described in Croft (1991) and Donohue (1999c). This entails examining the morphological marking associated with different semantic prototypes (physical objects, observable properties, and punctual actions) when they appear in different discourse functions: referring to real-world entities, modifying reference to such a real-world entity, or predicating a clause. Importantly, there is a non-random assignment of morphologically unmarked functions to semantic types. Croft presumes that the pattern seen in table xx87 will emerge.

Table 87. Matching semantic types to discourse functions in English
\begin{tabular}{|c|c|c|c|}
\hline & Reference & Modification & Predication \\
\hline Objects & UNMARKED NOUNS & genitive, adjectivalizations, PP's on nouns & predicate nominals \\
\hline Properties & deadjectival nouns & UNMARKED ADJECTIVES & predicate adjectives \\
\hline Actions & action nominals, complements, infinitives, gerunds & participles, relative clauses & UNMARKED VERBS \\
\hline
\end{tabular}

Examining these different factors, discourse function, semantic type, and morphological markedness, in terms of Skou-specific morphosyntactic criteria, we arrive at the data presented in table \(88 x x\). Here both the type and either the paradigm name, or the individual morpheme form is shown.

Table 88. Morphological marking in Skou
\begin{tabular}{|c|c|c|c|}
\hline & Reference & Modification & Predication \\
\hline Nouns & unmarked & possessive: & unmarked \\
\hline Adjective & dummy: & GEN + DAT unmarked & unmarked, \({ }^{37}\) \\
\hline Verbs & YA dummy: & relative clauses: & (or CLITIC=) agreement: \\
\hline & YA & CLAUSE + ING A & CLITIC= \\
\hline
\end{tabular}

The use of lexemes of the different major syntactic categories, appearing in different functional positions, is shown in the following sentences, the syntactic category being discussed is shown in bold.

For the putative class of nouns, we can see that there is no special morphological marking for referential and modificational functions, but that there is an obligatory possessive strategy, using the genitive and the dative morphemes, when one noun is used to modify another. This is true regardless of whether or not the noun is human or non-human, animate or inanimate. The following sentences illustrate the essential morphosyntax of members of this word class, using the morphologically complex noun pe=ueme 'woman' to illustrate; using a simple nominal root reveals identical patterns of behaviour.

Noun: referential


\footnotetext{
37 It appears that historically Skou employed noun class agreement proclitics on predicative adjectives. This is discussed in 5.5, 10.6 and 10.7.
}

Noun: modificational
Ke=angku=ing \(a\)
3SG.NF=child=the
[ \(\left.{ }_{\mathrm{NP}} \boldsymbol{p} \boldsymbol{e}=\boldsymbol{u} \boldsymbol{e m} \boldsymbol{e}-\boldsymbol{n} \grave{\imath}=\boldsymbol{n e} \quad k e=a n g k u-\boldsymbol{p} \grave{e}=\boldsymbol{p} \boldsymbol{e}\right]\).
3SG.F=woman-1SG.GEN=1SG.DAT 3SG.NF=child-3SG.F.GEN=3SG.F.DAT 'That boy is my wife's son.'

Noun: predicative
\begin{tabular}{|c|c|}
\hline \(P e=b a ̀=i n g ~ a ~\) & [PRED pe=ueme-nìne \({ }^{\text {en }}\). \\
\hline 3SG.F=person=the & 3SC \\
\hline
\end{tabular}
'That person is my wife.'
With adjectives we find a different pattern of morphological markedness. Adjectives are at their least morphologically saturated when they are used as modifiers within the NP, describing an attribute of the head noun. In this position no special morphology is required, and the adjective simply appears following the noun in the NP. When adjectives are used referentially, that is inside an NP but with no semantically contentful noun heading that NP, a dummy noun, \(y a\) 'thing', must be used as the head. The adjective cannot head an NP on its own, and is restricted to appearing in an attributive role. When the adjective is used predicatively it may be used as a bare word, or, if used with an inchoative sense ('become ADJECTIVE'), it may display agreement clitics. These are the same set of agreement clitics that are used with verbs, and it might be productive to speculate that in this usage the adjective has been transferred to the class of verbs, in keeping with the more typically verb-like aspectual structure that is associated with the inchoative use, as compared to the temporally undifferentiated static sense that is the default with this class. (This feature, the lack of any aspectual definition to the lexical item, is what differentiates the class of adjectives from non-agentive state-denoting verbs such as yáng 'be sick, be sore, hurt', which have aspectual structure.)

Adjective: referential
(14) [nP \(Y a \quad\) rong=fue \(a\) ] pá-nì=ne. thing old=that house-1SG.GEN=1SG.DAT
'The old one is my house.'
Adjective: modificational
[ NP Pá rong=fue a ] pá-nì=ne. house old=that house-1SG.GEN=1SG.DAT
'The old house is mine.'
Adjective: predicative, stative
(16) Pá=fue a [PRED rong].
house=that old
'That house is old.'
Adjective: predicative, inchoative
\begin{tabular}{|c|c|c|}
\hline & LPR & \\
\hline house=that & & \\
\hline
\end{tabular}
'That house is getting old.'
Verbs are the most morphologically marked of the open word classes in Skou. In all functional uses a verb must select from an inflectional paradigm to display agreement with its subject, whether the verb is functioning as a predicate, a modifier, or in a referential sense
(though some cells in the inflectional paradigm, and indeed some verbs, are not affixed. See 7.2 and 7.3 for discussion on the morphological patterns and their syntactic consequences). When in either of these last two functions, however, the verb must also include additional marking. Just as with adjectives, a referential verb requires the use of a dummy noun ya 'thing', since it cannot stand alone as head of the NP. Additionally, a verb appearing inside an NP, whether in a referential role or serving to modify another head inside that NP, must take the definite determiner =ing \(a\) 'the', or one of the other demonstratives =wi \(a\) 'this' or =fue \(a\) 'that'. These are obligatory, and are bleached of much (or all) of their deictic meaning when used with a modificational verb. (Despite this,they occupy the phrase-structural position for demonstratives, and may not cooccur with another, semantically 'full', demonstrative.)

Verb, referential
[ \({ }_{\mathrm{NP}} \mathrm{Fu}\) nì \(\boldsymbol{k} \boldsymbol{e}=\boldsymbol{k}\) á=ing \(a\) ] fu bápàlí. rain 1SG 3SG.NF=hit=the rain big
'The rain that struck me was a heavy rain.'
Verb, predicative
```

Fu [vpnì ke=ká ].
rain 1SG 3SG.NF=hit
'The rain struck me.'

```

The tests applied above are enough to establish that there are language-internal reasons to recognise the categories 'noun', 'adjective' and 'verb' as distinct lexical classes. In the following sections I shall examine some more finely-grained distinctions within those word classes, especially verbs, and finish with a discussion of some of the smaller, 'closed' lexical categories in the language, which we have not yet dealt with.

\subsection*{5.3 Subclasses of nouns}

Just as nouns are a distinct class of words, based on observable morphosyntactic patterns, so too can we talk of different classes of nouns, based on the morphosyntax that they display.

The primary division, because it is the only division that is regularly marked in a variety of places in the clause with dedicated morphological material, is the gender system. Discussed in more detail in chapter 10 , there is a two-way split that can best be described as involving objects that are classed as feminine-gendered, and those that are not (henceforth, non-feminine). In some cases a particular lexical item is not inherently gendered on way or the other, and may acquire a gendered reading through the overt marking for gender that it takes, in the pair in (21) and (22).
```

$p e=a n g k u$
3SG.F=child
'girl'

```
(22) \(k e=a n g k u\)

3SG.NF=child
'boy'
In other cases the nominal is inherently gendered, and there is not need for any overt specification. Examples of this sort of lexical items include balèng 'man', which is classificatorily non-feminine, and púwa 'sugar glider (sp.)', which is feminine. These are not identical, however. While balèng 'man' may appear with the non-feminine clitic, \(k e=b a l e ̀ n g ~\) 'man', it would take exceptional discourse circumstances for the same morphological behaviour to be observed with púwa and nouns of its sort: */\# pe=púwa. More details of the morphological realisation of the gender distinction, and discussion of the semantic factors behind the divisions, can be found in chapter 10 .

In addition to this distinction, there is an additional division between alienable and inalienable nouns. Discussed in more detail in chapter 9.3, inalienable nouns have a more complex, and obligatorily instantiated, system for marking possession. Examples can be seen in (23) and (24); note the additional dative morpheme in the inalienably possessed \(y u(n e)\) 'brother'.
\(y u-n e-n i ̀=n e\)
brother-1SG.DAT-1SG.GEN=1SG.DAT
'my brother'
```

yu-nì=ne
cousin-1SG.GEN=1SG.DAT
'my cousin'

```

Finally, the difference between animate and non-animate nouns is also marked in the grammar, though not with a dedicated construction. The differences can be seen in the optional prefixation of the human class markers \(b a ̀=\) to adjectives in predicative function that refer to animates (and, less commonly, \(y a=\) on adjectives that refer to an inanimate subject). More discussion of this follows in 5.5, and later in 10.6.

Examples of this optional prefixation can be seen in the following.
Animate noun: \(b a ̀=\) optionally (but preferably) prefixed
\[
\begin{equation*}
K e=b a ̀=w e=r a=w o ̀=f a=i n g ~ a \quad(b a ̀=) m a ́ k i=w o ̀ . \tag{25}
\end{equation*}
\]

3SG. NF=person=this=also=EMPH=only=the \(\quad \mathrm{ANIM}=\mathrm{big}=\mathrm{EMPH}\)
'He is the one who is really big.'
The number of pragmatic markers on \(k e=b a ̀\) in this sentence might seem unusual, but is in fact not really that uncommon in natural speech.

Inanimate noun: \(y a=\) optionally prefixed
```

Wùng=we=fa=ing a (ya=)máki=wò.
stone=this=only=the $\quad$ INAN=big=EMPH
'This stone is just really big.'

```

The opposite coding choices, with \(y a=\) on the adjectival predicate of a clause with an animate subject or \(b \grave{a}=\) on the adjectival predicate of a clause with an inanimate subject, are not grammatical, as seen in (25)' and (26)'.
\[
\begin{align*}
& \text { * } k e=b a ̀=w e=r a=w o ̀=f a=i n g ~ a ~ y a=m a ́ k i=w o ̀ ~  \tag{25}\\
& \text { * wùng=we=fa=ing a bà=máki=wò } \tag{26}
\end{align*}
\]

The animate/inanimate distinction is more covertly realised in the choice of existential verbs (see 10.5.2), the optionality of subject proclisis for verbs when inanimates serve as subject (see 7.2.1.1), and the inapplicability of plural marking on verbs by means of vowel alternations when these alternations index an inanimate entity (see 7.2.3.1).

\subsection*{5.4 Verbal categories}

As with all languages, not all verbs behave identically in terms of the syntactic frames they appear in. The morphology of verbs is discussed in detail in 7.2 and appendix 2; we can recognise the following broad categories of verbs:
- monovalent verbs
- monovalent directional verbs or motion
- bivalent verbs
- trivalent verbs

These different categories, along with sub-types, will be briefly discussed in the following sections, with both partial lists of membership, as well as exemplification of some of the morphosyntactic tests that distinguish them from other verb types.

\subsection*{5.4.1 Monovalent verbs}

Many verbs in Skou, as in all languages, subcategorise for only a single core argument. Testing for core or oblique status is unproblematic in Skou (see 3.11). We can recognise a three-way division in these verbs, based on the kind of core argument that they subcategorise for, and testable with a set of morphosyntactic constructions. These three different verbal types will be discussed in the following sections.

\subsection*{5.4.1.1 Agentive verbs}

What are here termed 'agentive verbs' are the set of monovalent verbs that take an argument that is either agentive, in the sense that it volitionally and intentionally carries out an action, and is in control of it, or else is potentially agentive. More importantly, they display morphosyntactic behaviour distinct from the nonagentive verbs described in 5.4.1.2. The agentive verbs form the majority of the monovalent verbs.

These verbs can be recognised as a morphosyntactic class distinct from the nonagentive verbs on the basis of their treatment in switch reference environments (this is discussed in 19.5.2). Examples of such verbs include bóe 'fight', fé 'lay down', \(f i\) 'meet', ha 'walk', \(i\) 'stand', lèng 'hide (self)', loe 'come', moeng 'sit', òe 'jump', pi li 'speak', rapue 'descend' (and the other motion verbs listed in 5.4.1.3), re 'go', and in fact most of the simple monovalent verbs in the Skou lexicon. These verbs do not present the active end of an 'activestative' continuum: verbs such as moeng 'sit' or \(i\) 'stand' are neither active nor dynamic. They are, however, verbs denoting situations which are at least potentially agentively controlled, and this appears to be the factor that is crucial for the morphosyntactic classification of these verbs in Skou.

Compare the following sentences, involving switch reference forms and a first clause with a motion predicate of some sort. The use of the (lexicalised) complex endpoint-marking sequence wa ko te is not permitted with non-agentive verbs, which simply use \(t e\), as seen in (27).

Agentive verb in first clause
```

Lòeng ke=k-a w-a=ko te pá.
road 3SG.NF=3SG.NF-walk 3SG.F-walk=OBV 3SG.F.go house
'He walked to the house.'

```
Nonagentive verb in first clause
\begin{tabular}{llll} 
* \(k e=k u t i\) & \(\boldsymbol{w} \boldsymbol{a}=\boldsymbol{k o} \boldsymbol{t}\) & te & pá \\
3SG.NF=fall 3SG. NF.go & 3SG.F-walk=OBV & 3SG.F.go & house \\
'he fell to the house' & & &
\end{tabular}
Ke=ku ti te pá.

3SG.NF=fall 3SG.NF.go=INSTR 3SG.F.go house
'He fell to the house.'
Tests for the status of the subject of non-motion verbs as agentive or nonagentive involves their appearance with certain aspect marking, where nonagentive verbs cannot occur with the aspectual/resultative marker toe, as described in the following section.

\subsection*{5.4.1.2 Nonagentive verbs}

Nonagentive verbs are the verbs that do not fit the criteria for being classed as agentive verbs: there is no potential volitionality or control in the action/event, and the argument does not exhibit any signs of it. Typically a nonagentive verb takes a theme or patient as its subject, since a change of location or a change of state are part of the defining criteria in being a monovalent predicate without an agentive subject: if not acting, then being acted upon (and so being affected) is the only other option. Verbs that exemplify this class include: báng 'crack', \(f\) ' 'run into', fu 'be afraid', \(j i\) 'break', lú ( \(f i\) ) 'cough', lú weng 'sleep', wang 'die', yáng 'be sick'. They embrace both dynamic and non-dynamic predicates, as can be judged from the partial listing above.

A morphological test for nonagentivity is the inability to occur with a resulting state coded by use of the aspectual marker toe (see 7.9.4). Compare the grammaticality of the following two sentences.

Agentive verb allows a resulting state
Lòeng \(k e=k-a \quad\) toe nòe nápi.
road 3SG.NF=3SG.NF-walk RESULT body tired
'He walked such that he was tired.'
Nonagentive verb does not allow a resulting state
\begin{tabular}{lll} 
* \(k e=k u ~ t i ~\) & toe & yáng \\
3SG.NF=fall 3SG. NF.go & RESULT & sore \\
'He fell such that he was sore.' &
\end{tabular}

There is in addition one attested bivalent predicate, mòng wí 'be affected by', that may take a non-agentive subject in one of its uses; this is mentioned in 5.4.3.4, and is discussed in detail in 13.3 as an instance of a passive in the language.

\subsection*{5.4.1.3 Motion verbs}

In addition to the unproblematic classes of agentive and nonagentive verbs, the verbs of motion present an interesting case of overlapping criteria. On the one hand a verb such as ha'walk' takes an volitional, controlling, intentional subject, and so could be classed as an agentive verb; on the other hand, the subject of the verb clearly undergoes a change of location in the process of the verb being accomplished, and so counts as being nonagentive. What are we to do with this apparent dilemma?

The unusual morphosyntactic nature of verbs of this sort in this region has been acknowledged at least since Pawley (1973), who dubbed them 'intradirective' verbs. Motion verbs show a division into those that subcategorise for a goal oblique (at least optionally), and those that do not. Compare the following sentences. In (32) the goal appears postverbally, while in (33), which is identical except for the choice of verb, this is ungrammatical. The only way to grammatically express the notion of walking to a goal in Skou is by using one of the alternatives in (34), with either serialisation with a verb that subcategorises for a goal, or affixation with an applicative, to license the postverbal oblique argument.
\[
\begin{align*}
& K e=t i \quad \text { pá. }  \tag{32}\\
& \text { 3SG.NF=3SG.NF.go house } \\
& \text { 'He went to (someone else's) house.' } \tag{33}
\end{align*}
\]
* \(K e=k-a\) ..... pá.3SG.NF=3SG.NF-walk house'He walked to (someone else's) house.'(possibly grammatical, but pragmatically unusual, with the reading'He walked [around inside] [someone else's] house.')
a. \(K e=k-a\) \(t i \quad p a ́\). 3SG.NF=3SG.NF-walk 3SG.NF.go house 'He walked to (someone else's) house.'
b. \(K e=k-a-n a \quad p a ́\).
3SG.NF=3SG.NF-walk-APPL house
'He walked to (someone else's) house.'

It is possible for a verb that subcategorises for an oblique goal to appear without a goal: Ke \(t i\) 'He's (already) gone.' is a perfectly acceptably sentence. The verbs, such as ha 'walk', that may not appear with a goal are also also grammatical with no specified location or goal: Ke \(k-a\) 'He's (already) walked.'. The verbs in the next section, however, are distinguished by the obligatory use of serialisation with other motion or manner of motion verbs when expressing a goal.

\subsection*{5.4.1.4 Direction verbs}

Directional verbs are a sub-class of motion verbs, but are treated separately because they almost invariably appear in serial verb constructions with other verbs of motion, something that is not true of motion verbs in general. This small closed class is composed of the verbs \(o\) 'seawards', hi 'westwards', hóe 'landwards' and e 'eastwards', which appear following manner of motion verb, and preceding a simple motion verb. Some examples are shown in the following sentences:
```

Amerika=ing a hóe [landeng] te=toe te=ti
America=the come.landward [landing] 3PL=3.come 3PL=3PL.do
ping te=ti=ko,...
war 3 PL=3PL.do=OBV
'America came, they arrived, and they waged war, ...'

```
\(P e=w-a \quad\) hòe-pa
3SG.F=3SG.F-from sago-water
pe=moe w-a hi bàme, ...
3SG.F=return 3SG.F-walk westwards village
    'She walked back from the sago swamps west to the village.'

More discussion of the behaviour of these verbs in serialisations used to expressing (decompositionally) the elements of a motion predicate can be found in 12.4. The strategies, involving serialisation, that are use with verbs expressing manner of motion, that do not allow for a simple postverbal goal, are discussed in that chapter.

\subsection*{5.4.1.5 When two (non-oblique) nominals make for a monovalent predicate: NV complex predicates}

There are many clear cases where we find verbs with two non-oblique nominals (as judged by any of the tests for grammatical status that have been presented in 3.11), and further discussion of the syntax of these bivalent verbs will be presented in 5.4.3. There are additionally predicates in which we can identifiy two preverbal nominals, but which we classify as monovalent. One such example is shown in (37) and (38).
\begin{tabular}{lll} 
[nominal] & [nominal] & [verb] \\
Pe=angku=ing a & pa & pe=pi. \\
3SG. \(\mathrm{F}=\) child=the & water & 3SG.F=swim \\
'The girl swam.' & &
\end{tabular}
```

Pe=angku=ing a tí pe=pi.
3SG.F=child=the sea 3SG.F=swim
'The girl swam in the sea.'

```

This construction appears at first glance to present two core nominals, since neither of them appear postverbally (the normal position for oblique arguments), and neither of them are marked with the instrumental case \(=p a\). Given the agreement on the verb, and the clause-initial position, we can safely assign \(p e=a n g k u\) to the function of subject. Where does that leave \(p a\) 'water' in (37) and tí 'sea' in (38)? This nominal would be logically thought to be the object of a bivalent clause, by virtue of being not the subject, and also not an oblique argument (as seen in its preverbal position). This is not, however, the case - a literal translation of this analytical assumption would be something like 'The girl swam the (water/sea).', just as in English we can say 'The girl swam a lap.' These nominals, however, lack the positional variation under topicalisation that is enjoyed by objects (as well as subject and obliques). Compare the grammaticality of the sentences with an immediately preverbal pa and \(t\) í in (37) and (38), with the unacceptability of their appearing sentence-initially in (37)' and (38)'.
(37)' * pa ing a, pe angku pe pi
(38)' * tí ing a, pe angku pe pi

In addition to subjects and objects, there are other core functions in Skou, namely the roles played by the so-called 'adjunct nominals', which are present in a large number of verbal predicates, with a variety of apparent roles. They are discussed in more detail in chapter 14, but they do not appear with the positional freedom and modificational possibilities that are associated with most objects, and so, while clearly not oblique arguments, cannot be assumed to be objects themselves.

\subsection*{5.4.2 Ambi-valent verbs}

There is a small number of verbs that, without any additional marking, can appear in either a monovalent or a bivalent frame. This is not by any means a common morphosyntactic pattern in the language, but some examples can be found. Examine, for instance, the following verbs.

Table 89. Ambi-valent verbs
\begin{tabular}{lll}
\hline \hline & monovalent reading & : \\
\hline bivalent reading \\
\hline jé & 'perch on, be at (a surface)' & 'put down, place' \\
jí & 'break, snap' & 'hit, break, (plural object)' \\
wépu & 'be covered' & 'cover something' \\
\hline \hline
\end{tabular}

Examples of the use of these verbs in both monovalent and bivalent uses can be seen in (39) - (43).

\section*{Monovalent}

Tang=pa ne=fé ne-ne já.
canoe=INSTR 1PL=place 1PL.be-RED sea
'We anchored out at sea in (our) canoe.'
\begin{tabular}{ll} 
Lang-nì=ne & jí. \\
pot-1SG.GEN=1SG.DAT & break \\
'My pots're broken.' &
\end{tabular}

Bivalent
\begin{tabular}{|c|c|c|c|}
\hline \(N e=r-o e\) & ne=moe & ne & bàme \(n e=f\) é. \\
\hline \(1 \mathrm{PL}=1 \mathrm{PL}-\mathrm{get}\). 1 PL & \(1 \mathrm{PL}=\) return & 1PL.go & village 1PL=place \\
\hline 'We took them an & d went back & the villa & and put them (up of \\
\hline
\end{tabular}
```

Lang-ni=ne ke=jí.
pot-1SG.GEN=1SG.DAT 3SG.NF=break.PL
'He broke my pots.'

```
\begin{tabular}{llll} 
Lúe nì=wépu fátà & ko & tue. \\
basket \(1 \mathrm{SG}=\) cover all \\
'I covered all the baskets.'
\end{tabular}

It is more normal for a concept that employs an ambi-valent verb in English, such as 'open', to use two distinct verbs in Skou, as in (44) - (45). (45) also illustrates the monovalent use of wépи.
(44) Tílong=fue a fáfà.
doorway=that open,
'That doorway is open.'
(45) Fu bápáli ma e tue, kúfong nì=wé=ko, rain big fall 3SG.F.be 3SG.F.do umbrella 1 SG=get.F=OBV nì=jíng e te ho, nì=wépu=pa, nì=moe. \(1 \mathrm{SG}=\) open 3 SG.F.be 3SG.F.go above \(1 \mathrm{SG}=\) cover=INSTR \(1 \mathrm{SG}=\) return 'It was pouring down, so I took my umbrella, opened it up above, and covering myself I went home.'

This minor ambivalent pattern is not productive in Skou. The examples listed above are all that have been found.

\subsection*{5.4.3 Bivalent verbs}

The class of verbs that take two core arguments, which are traditionally labelled 'subject' and 'object', is quite large in Skou. We can recognise certain subtypes of bivalent verbs that, because of their atypical morphosyntax, deserve special attention within this set. We shall discuss the majority case first, and then proceed to subclasses of bivalent verb types.

The typical bivalent verb presents the word order arrangement discussed in chapter 3, and, as expected, normal mapping conventions apply to assign the most agentive argument to the A role, and the most patient-like argument to the P role.

SUBJ:agent 3SG.NF=man=that 1SG 3SG.NF=hit 'That man hit me.'

Not all verbs obey these default mapping conventions. At least one verb, mòng wí 'get, be affected by', shows opposite mapping principles. An example of its use can be seen in (47), where the patient is coded (obligatorily, for this verb) as the subject, and the agent is coded (if at all) as an oblique argument.
SUBJ:patient OBL:agent
\begin{tabular}{llll} 
Ke=balèng=fue a mòng \(\quad k e=w i\) & pe. \\
3SG. NF=man=that \(\quad\) wound & 3SG.NF=get & 3SG.F \\
'That man got hit by her.' & & &
\end{tabular}

This behaviourally unique verb, and the morphosyntax associated with it is described in 12.6 and 13.3. But, apart from this, we find that almost all bivalent verbs can be described with the same frame as described \(k\) á, and exhibit the same morphosyntactic behaviour as is found for the clause in (46). Some important variants include the use of verbal collocations (akin to lexicalised serial verb constructions), and predicates involving adjunct nominals (already seen in 3.9, more details can be found in chapter 14). For instance, compare (46) with the following clause, in which most of the elements are the same:
SUBJ:agent OBJ:patient
\[
\begin{align*}
& \text { Ke=naké=fue a nì } \quad \text { kóeng } k e=k a ́ .  \tag{48}\\
& \text { 3sG.NF=dog=that 1SG } \\
& \text { tooth 3SG.NF=hit } \\
& \text { 'That male dog bit me.' }
\end{align*}
\]

Despite the addition of a new nominal, kóeng 'tooth', the clause is still best regarded as being bivalent, and not trivalent. This is because kóeng in (48) does not exhibit all the properties of a core (or, for that matter, oblique) argument, as described in 3.11.

The following sections describe some of the other constraints that are placed on bivalent clauses in Skou, and some of the more marked subclasses of bivalent clauses that are found.

\subsection*{5.4.3.1 Animacy and As}

In some languages of the New Guinea / Pacific Rim region there are restrictions on the animacy of arguments that may appear as the A of a bivalent clause. This can be realised in two ways (from a cross-linguistic perspective); either there can be a restriction barring inanimate As from appearing in that role in a clause, or there can be a cultural interpretation that all causers are animate.

The following sentence might appear to support the latter option:
(49) Anábí rí ke=lúe. machete wood 3SG.NF=chop
'The machete chopped the wood.'
In fact, this is not quite a simple as it might at first appear. The alternative to the animate machete' option is that anábí in the sentence above is in fact a pre-clausal topic, appearing without its case marker \(=p a\) (see 3.13 and chapter 11).

The first option, not allowing inanimate As, does not seem to be required by Skou, though it is striking how many of the verbs that take inanimate As are marked with atypical Ps (see 5.4.3.3). Examples of this sort of restriction can be seen in other langauges, such as Japanese or Tukang Besi. In Japanese inanimate causers of events must appear in instrumental case, marked by \(d e\), with monovalent verb roots, and not in nominative case with accusative objects for their bivalent verbs (younger speakers of Japanese find sentences such as (51) acceptable, but they are ungrammatical in the language of more conservative speakers).

Japanese: no inanimate As
Kaze=de \(\quad k i=g a \quad\) taor-ta.
wind \(=\) INSTR tree=NOM topple.INTR-PAST
'The tree fell because of the wind.'
*/\# Kaze=ga ki=o taos-ta.
wind \(=\) INSTR tree=NOM topple.TR-PAST
'The wind felled the tree.'
\[
\begin{align*}
& \text { Otoko=ga ki=o taos-ta. }  \tag{52}\\
& \text { man=INSTR tree=NOM topple.TR-PAST } \\
& \text { 'The man felled the tree.' }
\end{align*}
\]

In Tukang Besi a similar restriction holds: an inanimate may act as a an instrumental causer of an event, but cannot be coded as the A. In the examples below we can see that nominative case is not an option for iri 'wind' in Tukang Besi as the A of a bivalent clause, nor is the bivalent tu'o possible as a verb choice for the meaning intended when the causer is inanimate.

Tukang Besi: no non-agentive As
No-buti te hu'u nu kau (ako) te iri. 3R-fall CORE tree GEN wood BEN/PURP/INSTR CORE wind 'The tree fell because of the wind.'

\footnotetext{
* No-tu'o te hu'u nu kau na iri.

3R-fell CORE tree GEN wood NOM wind
'The wind toppled the tree.'
}
(55) No-tu'o te hu'u nu kau na mo'ane. 3R-fell CORE tree GEN wood NOM man 'The man felled the tree.'

Examining further evidence, we can state that Skou is not a language that absolutely restricts the semantic roles of its syntactic functions. Examine the following two sentences, both using the verb \(k u\) 'stab, pierce', but the first with a human, animate A, and the second with an inanimate A . When the A is inanimate, the P appears postverbally, an oblique-coding strategy (see 5.4.3.3). When, on the other hand, the A is animate the P appears in the normal (for core arguments) preverbal position, and the verb takes agreement clitics.

\section*{Skou: Inanimate A correlates with postverbal P}
```

Kong ku nì.

```
thorn stab 1SG
'I got poked by a thorn.'
```

Pe=angku=ing a nì pe=w-u.
3SG.F=child=the 1SG 3SG.F=3SG.F-stab
'The girl poked me.'

```

Further discussion of other instances of postverbal Ps can be found in 5.4.3.3.

\subsection*{5.4.3.2 Bivalent verbs with a restricted \(P\)}

Some verbs inflect as normal through consonant alternations and proclitics (7.2.1, 7.2.2), and take the normal two arguments of a bivalent verb, but are restricted as to what object may appear overtly. One such verb is lúe 'hear', which cannot (in most usages) appear with plain nominal objects, but must take either a complement or a noun modified by a relative clause. Compare the differing grammaticality judgements of the following sentences.
```

Mè pí mè=pi nì=lúe.
2SG speech 2SG=2SG.do 1SG=hear
'I can hear you talking.'

```
```

* mè nìlúe
2SG 1SG=hear
'I can hear you.'

```

Sentence (59) is in fact grammatical with the reading 'I know you.', or 'I am following what you are saying.' (as a discourse marker), but not with the intended reading as given above. The ungrammaticality of (the 'hearing' reading of) (59) is based on the fact that it takes a human object, not the clausal complement seen in (58). Similar, non-human object sentences can be seen in (60) - (61), showing that a clausal complement is the preferred object of lue, and a nominal one is ungrammatical.
(60) Nì naké=ing a bóeboe ke=lá nì=lúe.

1SG dog=the bark 3SG.NF=make.noise 1SG=hear
'I heard the dog barking.'
(61) Nì nì lúe naké ing a bóeboe ke lá.
'I heard the dog barking.'
(62)
\begin{tabular}{ll} 
* nì naké=ing a & nì=lúe \\
1SG dog=the & 1SG=hear \\
'I heard the dog.' &
\end{tabular}

These verbs can take nominal objects of the sort shown above only when that objects is a participant that has been raised from a subordinate complement (see chapter 15). This results in clauses such as (62)'.
(62)' Nì naké=ing a nì=lúe hòe ke=k-ang 1SG dog=the \(1 \mathrm{SG}=\) hear sago \(3 \mathrm{SG} . \mathrm{NF}=3 \mathrm{SG} . \mathrm{NF}-\) eat 'I heard the dog eating the sago.'

\subsection*{5.4.3.3 Verbs with an atypical P: oblique coding strategies}

Another way in which a verb may be non-typical in terms of the morphosyntactic treatment of the core arguments is by adopting an oblique coding strategy for the \(P\). There are some verbs, such as héng 'ask', in which the P can be either pre- or postverbal; postverbally it appears as a locative, not as a goal. This can be seen in the following examples.
\(K e=\) ing \(a \quad n i ̀ \quad k e=k\)-éng. 3SG.NF=the 1SG 3SG.NF=3SG.NF-ask
'He asked me.'
(64) Ke ing a ke kéng nì.

The morphosyntactic coding status of the addressee P as a locative, rather than goal, can be shown by the fact that it follows an auxiliary, if an auxiliary is present and the P is postverbal. This can be seen in (65).
\begin{tabular}{lll} 
Ke=ing a & \(k e=k\)-éng-kéng & \(l i\) \\
3SG. & ni. \\
3S=the & 3SG.NF=3SG.NF-ask-RED & do 1SG
\end{tabular}
'He asked me.'
(66) * ke ing a ke kéng kéng nì li

The status of an 'obliquely-coded' object is the same as the prepositionally-marked objects of, for example, English: they are grammatically objects, but share some of the morphosyntactic coding strategies of oblique or adjunct nominals. Just as a verb such as listen in English requires that its object be marked with the preposition to, even though it does not display the properties of phrasal verbs such as see to 'look after, take care of', so too the postverbal objects in Skou share a coding property of obliques, but the syntactic status of objects.

With any pronoun other than a first or second person singular one we can see a further consequence of postverbal position: the pronoun used can optionally be drawn from the genitive set. Compare (63) and (64) with (63)', (63)", (64)' and (64)".
(63)' Ke=ing \(a\) ne \(k e=k\)-éng. 3SG.NF=the 1PL 3SG.NF=3SG.NF-ask 'He asked us.'
(63)" * ke ing a nè ke kéng nì. 1PL.GEN
(64)' Ke ing a ke kéng nè. 1PL.GEN
(64)" Ke ing a ke kéng ne. 1PL

If the thing asked about is expressly mentioned as well, then the addressee must appear preverbally, and the information sought is coded postverbally.
(67)
\[
\begin{array}{lll}
\text { Ku-nì=ne } & \text { nì=héng } i \quad l i & p e=t e \\
\text { child-1SG.GEN=1SG.DAT } & \text { 1SG=ask be do 3SG.F=3SG.F.go } & \text { è̀. } \\
\text { 'I'm asking my daughter }{ }_{\mathrm{i}} \text { where she } \mathrm{e}_{\mathrm{i}, \mathrm{j}} \text { 's going.' } &
\end{array}
\]
(67)' * nì=héng \(i\) li ku-nì=ne pe=te \(\quad n e ̀\)

1SG=ask be do child-1SG.GEN=1SG.DAT 3SG.F=3SG.F.go Q 'I'm asking my daughter \(\mathrm{r}_{\mathrm{i}}\) where she \(\mathrm{e}_{\mathrm{i}, \mathrm{j}}\) 's going.'

More commonly only the thing asked about is mentioned, and the addressee is omitted, through coreference with the subject of the subordinate clause. The reading of (67) in which the subject of the subordinate clause is not coreferential with the askee of the main clause is not supported by (68).


The same morphosyntactic pattern is found with the semantically more generic verb lóeng when it is used with the sense 'answer' (though not when it simply means 'say' or 'tell, order', providing some evidence that these may perhaps be better thought of as representing lexcially separate albeit phonologically undifferentiable verbs). The question described in (68) could be replied to with lóeng 'answer' as seen in (68)', which has only one possible reading, but (69) shows that a use of lóeng to mean 'say, tell' out of a question:answer context is ambiguous.
\(N i ̀ p e=n\)-úng pe=te-te báng tue.
1SG 3SG.F=3SG.F-say 3SG.F=3SG.F.go-RED beach 3SG.F.do
'She \({ }_{\mathrm{i}}\) answered (to) me that she \(\mathrm{i}_{\mathrm{i},{ }^{*} \mathrm{j}}\) wanted to go to the beach.'
\begin{tabular}{|c|c|c|c|}
\hline Nì & \(p e=n\)-úng & \(p e=t e-t e\) & báng tue. \\
\hline 1SG & 3SG.F=3SG.F-say & 3SG.F=3SG.F.go-RED & beach 3SG.F.do \\
\hline & ld me that she \(\mathrm{i}_{\mathrm{i}, \mathrm{j}}\) & nted to go to the beac & \\
\hline
\end{tabular}

When lóeng is used with these other senses, such as 'say', 'tell', order', and with other verbs of speaking, the addressee is likely to be coded as a preverbal argument unless the speaking complement is mentioned, in which case the addressee appears postverbally and the complement of speech is marked as the object of the verb. Compare the contrastive position of 'child' in the following examples. In (70), as the sole argument other than the subject, it appears preverbally. In (71) on the other hand the communication appears preverbally, and the child spoken to is coded in the position accorded to locations, postverbally.
\begin{tabular}{llll} 
Ku-nì=ne & pí & \(n i ̀=l i\) & \(i \quad l i\). \\
child-1SG. GEN=1SG.DAT speech & \(1 \mathrm{SG}=\mathrm{do}\) & be do \\
'I spoke to my child.'
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Pí-ha & \(m e ̀=p i\) & me & \(p i\) & \(k u-m e ̀=m e\). \\
\hline speech-what & \(2 \mathrm{SG}=2 \mathrm{SG}\).do & 2SG.be & 2SG.do & child-1SG.GEN=1SG.DAT \\
\hline 'What did yo & say to your ch & & & \\
\hline
\end{tabular}

Since the addressee in these examples can be coded either pre- or postverbally, we must ask whether it is a P that can acquire exceptional positional freedom, or an oblique that may appear preverbally (or is the verb has two subcategorisation frames, one that allows for a preverbal object, and one that allows for a postverbal oblique). The second possibility would be
unprecedented in the language: there is no exceptional morphological marking of the construction, regardless of the position of the addressee, and there is no evidence for a general process analogous to the dative shift construction in English. The first possibility, that the addressee is a P that can, exceptionally, appear postverbally, seems the more plausible of the two options, and Ps are attested in both (usually) preverbal as well as (rarely, but robustly) postverbal positions, and the speaking verbs feature in the list of verbs with postverbal Ps (an example is héng 'ask', earlier in this section).

The complex predicate pílang li 'curse' also allows for an apparently postverbal object of a sort. The postverbal P clause is an alternative to the use of a complex predicate with \(=k o\), the obviative marker for clauses with different subjects, and tue, the 3SG.F form of li 'do' following the simple monovalent predicate pílang \(l i\) 'curse'. In this case of the non-complex predicate with a postverbal P the cursee is marked as an oblique location, not as a postverbal object (the tests are elaborated on in 5.4.3.3). Both options are shown below.

Bivalent clause with postverbal object
```

Te=Bapúbí pí-lang te=ti áì-nì=ne.
3PL=Skou Sai speech-curse 3PL=3PL.do father-1SG.GEN=1SG.DAT
'The Skou Sais cursed my father.'
(here pílang li means 'place a curse on', not simply 'swear at/insult')

```

Monovalent first predicate serialised with monovalent, location-specifying ko li
```

Te=Bapúbí píllang te=ti ko tue
3PL=Skou Sai speech-curse 3PL=3PL.do be.at 3SG.F.do
aù-nì=ne.
father-1SG.GEN=1SG.DAT
'The Skou Sais cursed my father.'

```

An example of a postverbal P with interesting behaviour is found in the predicate 'bump into, collide with', which is expressed with the verb \(f i\), the same phonological form as that of the verb that is used to code 'meet', also fí. (Certainly it is the same phonological form, and I would argue that it is in fact the same lexical entry as well.) Compare the following two sentences, neither of which can show the word order of the other without the interpretation changing.
\[
\begin{align*}
& \text { OBJ V } \\
& M e ̀ \quad n i ̀=f i ́ .  \tag{74}\\
& \text { 2SG 1SG=meet } \\
& \text { 'I met you.' } \\
& \text { * 'I bumped into you.' } \\
& \mathrm{V} \quad \text { OBL } \\
& N \grave{l}=f i \quad m \grave{e} . \\
& \text { 1SG=meet } 2 \mathrm{SG} \\
& \text { ' 'I bumped into you.' } \\
& \text { * 'I met you.' }
\end{align*}
\]

In examples such as these it is not straightforward to know what kind of syntactic construction we are confronted with. Are there two phonologically identical (both [fi], \([\vdash]\) ) and semantically very closely related verbs which, by virtue of their semantics, have different case frames, or if there is only one lexical entry, and the semantic interpretation of the verb varies depending on the case frame that is used with the arguments? I shall treat this pair as two
lexically linked verbforms that share a common semantic (and phonological) base, but which specify two different subcategorisation frames (approximately 'meet \(\langle\mathrm{SUBJ}, \mathrm{OBJ}\rangle\) ' and 'bump into 〈SUBJ, OBL〉', respectively). Speaker attitudes provide some support for this stance, and this can be taken as reasonably strong evidence, given the firm reactions speakers have to the differentiation of other phonologically identical lexical items ( \(f\) í is also the phonological form of the words 'louse' and 'muddy', which speakers insist should be treated as different).

\subsection*{5.4.3.4 'Inverted' predicates}

Another group of verbs which display a non-typical P are those that show inverted behaviour, such as is also found in the coding of psych-verbs in various western European languages (though not in modern English; relics remain in expressions such as methinks, with the experiencer subject coded in a non-nominative case). These clauses show atypical behaviour because the arguments in the clause are very far removed from the prototypical agent and patient that characterise (indeed, define) primary transitive verbs. In inverted-behaviour clauses the two core arguments are an experiencer and an effector. The experiencer is coded as the P of the clause, unlike the coding choice found for most predicates involving experiencers, such as perception predicates such as 'see' and 'hear'. Because of this, the morphosyntactic behaviour of the elements of the clause is at odds with the majority coding strategies encountered, including those coding primary transitive verbs.

This same inverted-coding strategy is employed in many languages of New Guinea, including Skou. One simple example is shown in (76). Here we can see that, assuming that the normal SOV word order is exemplified here as well as elsewhere, oe 'burp' is the subject of the sentence, and pe 'she/her' is the object. Apparently confirming this hypothesis, the verb shows agreement for a third person non-feminine argument, not the third person feminine argument that represents the burper. From the clause-internal evidence, then, the subject of this clause is unambiguously the inanimate burp, oe. \({ }^{38}\)
```

(76) $O e$ pe $k e=$ láng.
burp 3SG.F 3SG.NF=burp
'She burped.'
(Literally, '(A) burp burped her.')

* oe pe pe=láng, * pe oe (pe=/ke=)láng

```

This coding strategy is similar to that found in many New Guinean or western European languages, such as can be seen in the following Dutch sentence. Here again the experiencer is coded in the position normally reserved for objects of transitive clauses, and the effector appears preverbally, and apparently with subject agreement on the verb.

Dutch
(78) Warme chocolade melk
beval-t mij best. hot.chocolate please-2/3SG 1SG best 'I like hot chocolates.'

38 Several doubts can be raised about this analysis. A characteristic of the subject of a transitive clause is that it can occur with a copy pronoun at the end of the NP, marking it as ergative. This is not possible with predicates such as oe ká: * oe ke pe ke=láng. Furthermore, the switch reference mechanism does not track the burp, but the burper (19.5).
\(*\) chocolade melk beval mij best, \({ }_{c}^{*(\text { mijlik) beval(t) chocolade melk best }}\)
please(1SG)
1SG/1SG.NOM

This pattern is not found in modern English (or indeed in many languages), but is a widely attested coding strategy in New Guinea generally. Inverted predicate constructions are found in Skou, though it is not as prevalent in Skou as it appears to be in other languages of the area. Some other examples of verbs that are used with this sort of inverted matching of semantic roles to the grammatical functions subject and object, such that the more agentive experiencer is coded as object while the apparently effector-like argument is coded as subject.
\[
\begin{array}{lll}
F u & n i ̀ & k e=k a ́ .  \tag{80}\\
\text { rain } & \text { 1SG } 3 \text { SG. NF=hit } \\
\text { 'I got soaked in the rain.' }
\end{array}
\]

Further discussion of the morphosyntactic behaviour of these predicates can be found in chapter 14. A similar, but not identical, construction can be seen in (81). Here the 'experiencer', the one suffering from snot, is coded as a topic, external to the clause, and the afflicting entity is the subject of the monovalent clause. Marking the verbal part of the clause with forms appropriate for the pronominal features of the topic is not a grammatical possibility.
\begin{tabular}{lllll} 
(81) & Nì lóengri tue & \(e\) & tue. \\
& 1SG Snot & 3SG.F.do & 3SG.F.be & 3SG.F.do \\
& 'I'm full of snot.' & & \\
(82) * nì lóengri \((n i=)\) li i li & &
\end{tabular}

This construction has more in common with the external possession constructions, particularly topic possessors. These are covered in more detail in 9.5.2.1.

\subsection*{5.4.3.5 A highly atypical, inverted predicate: mòng wí'be hit'}

One bivalent predicate shows inverted behaviour of a verb unlikely kind. While the verbs described in the previous section all code the more animate argument as the object of the clause, mòng wí goes beyond this in that both the arguments are animate, and there is a controlling, volitional argument which is not coded as subject. Examine the following clause:
\begin{tabular}{lll} 
Mòng \(\quad k e=w i ́\) & \(n i ̀\). \\
wound & 3SG. NF=get & 1 SG \\
'He got hit by me.' &
\end{tabular}

In this clause both participants are animate; the agent, \(n i\), is volitional and in control of the event. It is, however, not coded as an A, but as a postverbal oblique. At the same time the patient, ke, is coded as a subject. In effect this predicate seems to function as a passive counterpart to the more 'normal' verb ká 'hit, kill'. Compare (83) with the following sentence, which shows a 'normal' active configuration:
\[
\begin{array}{ll}
\text { Ke } & n i ̀=k a ́ .  \tag{84}\\
\text { 3SG.NF } & \text { 1SG=hit } \\
\text { 'I hit him.' }
\end{array}
\]

More discussion of the mòng wi predicate, and the arguments for and against analysing it as a lexicalised passive counterpart to the verb ká 'hit, kill', can be found in 13.3.

\subsection*{5.4.3.6 Possibilities for subcategorisation}

Different verbs take not only a different number of arguments, but also subcategorise for different types of arguments. In this section a brief summary of the different kinds of monovalent and bivalent verb types will be given.

We have seen that the basic bivalent verb subcategorises for two arguments, a subject and an object, and that these are realised in preverbal positions (see 5.4.3). Some (very few, but areally predictable: 'hear' is often restricted as to the object it takes in the New Guinea region) verbs are not free with respect to the objects that they may appear with, but that object will still be coded preverbally (see 5.4.3.2). More significantly, there are various predicates which coded their second argument postverbally, and tests applied to these verbs show that this argument is an oblique argument, not an object (see 5.4.3.3). Yet other verbs show alternate coding for their second argument: the second argument may appear either preverbally or postverbally, with a corresponding change in semantic transitivity associated with the clause (see 5.4.3.3). The final class of bivalent predicates (see 5.4.3.4) is unusual only from the perspective of the normally animate subject background that Skou, and most Papuan languages, display. In terms of subcategorisation frames they do not show any unusual properties.

Taking the assignment of the subject grammatical function to the highest role and the assignment of object to the second argument to be a default setting, we can specify the different predicate types that we have described and defined in 5.4.1-5.4.4, in terms of the different argument structure configurations that they display, as shown in (85) - (91).

Verb types and argument structure

Inverted predicates \((5.4 .3 .4,5.4 .3 .5)\) are assumed to be a variant of the plain bivalent category, but with unusual linking between the argument structure and the level of semantics. The mòng wí predicate is argued in 13.3 to be in fact a lexcial passive, with the same subcategorisation frame as the low-transitivity bivalent verbs, separated from them only by the linking to the semantic roles, being inverted for the passive. We have examined the characteristics of the various monovalent and bivalent verb types in the preceding sections, and the following section describes the morphosyntax of trivalent predicates.

\subsection*{5.4.4 Trivalent verbs and verbal collocations}

There is a small number of verbs that initially appear to subcategorise for three arguments. One such verb, typical of other members of its small class, is the verb na lùng 'teach, instruct'. This verb subcategorises for three participants:
- an agent who carries out the instruction
- a theme that is the subject taught, and
- a goal that is the destination of the teaching.

Rather than being a true trivalent verb, these three nominals are coded as subject, object and oblique, respectively, as can be seen in the following sentence. Here we see the teacher, nì, as subject, shown by its clause-initial position and the agreement marking on the verb. The subject of instruction is the Wutung language, te Oeti pí te, and it is the object, adduced by its preverbal position. The learner, ku nì ne 'my child', is coded postverbally: it may not appear in a preverbal position, as it is an oblique argument.
\begin{tabular}{llll} 
Nì te=Óeti pí-tè & nì=na lùng & \begin{tabular}{l} 
ku-nì=ne. \\
child-1SG.GEN=1SG.DAT
\end{tabular} \\
1SG 3PL=Wutung language-3PL. GEN & \begin{tabular}{l} 
1SG=teach
\end{tabular} \\
'I taught the Wutung language to my child.' & \\
* nì ku nì ne nì na lùng
\end{tabular}

The standard tests for objecthood and core status (see 3.13) indicate that ku nì ne in the sentence above is neither an object nor an adjunct, and so must be regarded grammatically as a subcategorised-for oblique. Although the verb subcategorises for three participants, not all of them have core arguments status, similar to the behaviour of verbs like 'put' or 'place' in English which take one subcategorised-for pariticpant which is neither the subject nor the object.

A more cross-linguistically typical example of a trivalent verb is the translation equivalent of 'give' (see Newman 1996, 1998). In Skou this is not a simple lexical item, being rather composed of 'get' and then a bivalent verb of giving (see 7.8 for more information on these sort of lexicalised verbal collocations). Nonetheless, the syntax of the construction has some interesting complications, and is best analysed as a predicate with three arguments. Examine the following sentence:
(94) Bápáne taíngbe ke=wé leng nì.
friend money 3SG.NF=get.F give 1SG
'My friend gave me some money.'
In this sentence the recipient, ni, appears following the verbal sequence wé leng, and so might be construed as an oblique argument, just as the instructee ku nì ne 'my child' in (92) was considered oblique. We can, however, show that the recipient, as well as the theme, is a core argument of the serial verb construction. In a raising structure (see chapter 15) the recipient, as well as the subject and the theme, is eligible for raising to be marked as the object of the matrix clause, an option that is allowed only to core arguments, and not to obliques. More detailed argumentation and documentation of this construction can be found in chapter 15, but an example illustrating the ability of the recipient to appear raised is given below.
Nì pe=r-ú bápáne taíngbe ke=wé leng.
1SG 3SG.F=3SG.F-know.F friend money 3SG.NF=get.F give
'She knew that my friend gave me some money.'

Not all predicates which appear to take three arguments show this kind of symmetrical behaviour, syntactically (though not morphosyntactically). Examine the following sentence:

Rópu-nì=ne yata nì=li te=bà.
book-1SG.GEN=1SG.DAT transact \(1 \mathrm{SG}=\) do \(3 \mathrm{PL}=\) person
'I sold my book to someone.'

In this case the same test can be used to show that te bà is not a core argument, and that the verb only subcategorises for two core arguments, a subject and an object, and that the person to whom the book is sold is an oblique.
```

(97)
* te=bà pe=r-ú nì rópu-nì=ne yata
$n i=l i$
1SG 3SG.F=3SG.F-F.know 1SG book-1SG.GEN=1SG.DAT transact
$1 \mathrm{SG}=\mathrm{do}$
'She knew that I sold my book to someone.'
(raising rópu nì ne or nì is also perfectly grammatical: Rópu nì ne pe rú nì yata nì
li te bà, or Nì pe rú nì rópu nì ne yata nì li te bà)

```

Similarly, a construction analogous to (97) with na lùng as the predicate in the subordinate clause is not eligible for raising of the goal:
\[
\begin{align*}
& \text { * ku-nì=ne pe=r-ú nì }  \tag{98}\\
& \text { child-1SG.GEN=1SG.DAT 3SG.F=3SG.F-F.know 1SG } \\
& \text { te=Óeti pí-tè nì=na lùng } \\
& \text { 3PL=Wutung language-3PL.GEN 1SG=teach } \\
& \text { 'She knew that I taught the Wutung language to my child.' }
\end{align*}
\]
(again, raising the agent or theme of the subordinate clause is acceptable: Nì pe rú te Óeti pí tè nì na lùng ku nì ne, and Te Óeti pí tè pe rú nì na lùng ku nì ne)

When wé leng is used in serial construction with re 'go' with the sense of 'send', the recipient is not a core argument. Here the non-core status of the goal of 'go' overrides the core status assigned to a recipient of the predicate wé leng.
\[
\begin{align*}
& \text { Rópu nì=wéleng te-te } k e=a n g k u-n i=n e .  \tag{99}\\
& \text { book 1SG=get.F give 3SG.F.go-RED 3SG.NF=child-1SG.GEN=1SG.DAT } \\
& \text { 'I sent a book to my child.' }
\end{align*}
\]

Similar behaviour is found with other three-participant verbs or verbal expressions, such as á re lolo li 'exchange', which takes an oblique recipient.
(100) Nì táng ni=á re lolo nì=li Te Húele 1 SG bird 1SG=carry go exchange \(1 \mathrm{SG}=\) do Sangke 'I exchanged a bird with the Sangkes.'

With verbs of throwing things at goals, the basic verb lú 'release, throw' takes only two arguments, the agent and the thing thrown. In order to express the goal, a complex serialising construction is used, seen in (101), inwhich the oblique goal is marked with the serialisation lú hí 'release hit'.
(101) Wúng \(n i ̀=l u ́=k o \quad n i ̀=l u ́ ~ h i ́ ~ n a k e ́ . ~\) stone \(1 \mathrm{SG}=\) release \(=\mathrm{OBV} 1 \mathrm{SG}=\) release hit dog 'I threw a stone at the dog.'

It is also possible to express this without a serial verb construction, but not with the verb lú alone.
(102) Wúng nì lú hí naké.
(103) * wúng nì lú naké

More discussion of verbal predicates that inherently specify an instrument, and so do not require an intermediary-agent type instrument to appear with the normal instrumental marker \(=p a\), is given in the following section.

\subsection*{5.4.5 Verbs with inherent instruments}

A small set of verbs are semantically specifiedrequire an instrument or means in order to be successfully carried out. In this case the instrument is not marked with \(=p a\), and the 'instrumental' nominal appears immediately preverbally, as in the following sentence, in which te=Máwo pí-tè is the instrument.


These predicates do not require the instrumental NP to appear with the normal marker for instruments, \(=p a\), when there is no theme present. When there is an explicit object, however, then the means must be marked as instrumental:
(105) Nì te=Máwo pí-tè=pa húhú nì=li i li. 1SG 3PL=Mabo language-3PL.GEN=INSTR story \(1 \mathrm{SG}=\) do be do 'I'm telling a story in the Skou language.'
(106) * nì te Máwo pí tè húhú nì li i li
(Good with the reading 'I'm telling the story of the Skous' language.')
This restriction might simply reflect the fact that they are not instruments in the sense of being a physical object that is used to carry out an action. These predicate types are nonetheless remarkable for allowing three different preverbal NPs, though one of them, the instrumental NP , must be case marked for its semantic role in order to be present grammatically in the sentence. An example of a two-place verb that can take an instrument with the same morphosyntactic coding as pí in (105) above can be seen in (107), where anábí appears with the same \(=p a\).
\begin{tabular}{|c|c|c|c|}
\hline (107) & Rí=ing \(a\) ke & anábí=pa & \(k e=l u ́ e\) \\
\hline & wood=the 3 SG.NF & machete=INSTR & 3SG.NF=chop \\
\hline & 'He cut the wo & ith a machete.' & \\
\hline
\end{tabular}

More examples of the use and syntax of instruments in clause can be found in 11.6

\subsection*{5.5 Adjectives}

Adjectives are an open class of words in Skou. They can be distinguished from verbs in that they may appear inside an NP to modify nouns without needing to be in a relative clause, and they may be predicative without requiring subject agreement (unless they have an inchoative interpretation). They can be distinguished from nouns by their inability to head an NP, to appear as the possessor of another noun, and the relics of a classification system that applies still most frequently when they are predicative, but also sometimes when they are NP-internal modifiers.

Examples of non-subject agreeing predicative adjectives have already been seen in 5.2. The fact that adjectives are not required to appear inside relative clauses can be adduced by the relative independence of the deictics and demonstratives from the presence of adjectives. In relative clauses the presence of a deictic is near-obligatory (see 8.3), and in many cases has little semantic content: the deictic is simply part of the list of structural requirements for a relative clause, and not an independent NP modifier. With adjectival modification, however, the presence of a deictic is not mandated by the presence of a modifying adjective, and when one is present is always carries full semantic weight, as can be seen in the following pairs of sentences, which contrast phrases with adjectives and verbs modifying nouns.

Adjectival modifier, morphological deictic
(108) ke=balèng máki=ing a 3SG.NF=man big=the 'the big man'

Adjectival modifier, no deictic
(109) ke=balèng máki 3SG.NF=man big 'a big man'

Relative clause modifier, morphological deictic
(110) ke=balèng yáng=ing a 3SG.NF=man sick=the 'a/the sick man'

Relative clause modifier, no deictic
(111) \#/? ke=balèng yáng

3SG.NF=man sick
'a sick man'
The position of the adjective in the NP is also different to that of relative clauses. Although both modificational adjectives and modificational relative clause follow the noun that they modify, numerals may follow an adjective, but may not follow a relative clause (see 8.3.5). Examples can be seen in the following sentences; notes that the order Noun-Relative clauseNumeral, seen in (114), is ungrammatical regardless of the placement of =ing a.

\section*{Noun-Adjectival-Numeral}
te=balèng máki héngtong=ing a
\(3 \mathrm{PL}=\) man big three=the
'the three big men'
Noun-Numeral-Relative clause
te=balèng héngtong yáng=ing a
3PL=man three sick=the
'three sick men'
Noun-Relative clause-Numeral
(114) * te balèng yáng (ing a) héngtong (ing a)

These restrictions indicate that there are in fact two different structures involved; we may simply represent them templatically as shown in (108)'/(112)' and (110)'/(113)'.
\begin{tabular}{clll} 
NP: & Noun Adjective & Numeral Relative clause & Demonstrative \\
\((108)^{\prime} /(112)^{\prime}\) & te=balèng máki & (héngtong) & \(=\) ing \(a\) \\
\((110)^{\prime} /(113)^{\prime}\) & te=balèng & (héngtong) yáng=ing a &
\end{tabular}

It is worth noting that the word class of adjectives is the only part in the language in which we can see overt and dedicated morphological evidence for the animate/inanimate classification system (see chapter 10 for further discussion). This is accomplished by the use of classificatory proclitics, similar to the verbal proclitics but of different source and with different forms, that attach to the front of the adjective; they may be found when the adjective is either predicative or attributive. Examples can be seen in the following sets, showing the plain adjective, and then the form used with animate nouns, and the form used with inanimate nouns.
\begin{tabular}{llll} 
Plain & Animate & Inanimate & \\
rong & bà=rong & ya=rong & 'old' \\
náfeng & bà=nafeng & yá=náfeng & 'strong, hard' \\
bí & \(b a ̀=b i\) & \(y a ́=b i ́ ~\) & 'empty, valueless, unsophisticated'
\end{tabular}

It is not, synchronically at least, completely obligatory to realise the classification system morphologically (synchronically at least): in many instances a speaker will omit the classificatory proclitic on an adjective, with little or no apparent change in sense or meaning. Further evidence for the idea that this classification system is being lost synchronically can be found in the presence of some unusually long (three-syllable, as opposed to the more normal two-syllable) adjectives that begin with the syllable ba-, such as bápáli 'big, great' and bamúa 'true, real'. With these adjectives there is no variation in the presence or absence of the \(b a\)-, though these words are pragmatically restricted to apply to humans (the homonym máki 'big' is used with non-human reference). This suggests strongly that they originally had the forms páli and muà respectively, and that an earlier class marker has become fused onto the root to yield the modern trisyllabic forms. There is also one adjective, yali 'short', which has a form that might suggest an initial frozen prefix \(y a\)-, possibly related to \(y a\) 'thing' and the inanimate class marker. Since this adjectival root is only disyllabic, a common root size in Skou, the case for this being diachronically multimorphemic is weak. Still, monosyllables are still the most common root type in Skou, so yali must be treated with suspicion.

The classification system is clearly made up of two morphemes, \(b a ̀=\) for animates and the more optional, and more rarely attested, \(y a=\) for inanimates (we do not have to consider there to be a third choice, that involving an uncliticised verb, because it does not contrast in the same construction with the two overt morphemes). These are clearly etymologically related to the independent nominals bà 'human, person' and ya 'thing, what', though in their classificatory function we can see that the scope of the morphemes is somewhat different. While bà the free nominal can only refer to humans, it is clear that \(b a ̀=\) the classificatory proclitic can refer to any animate referent, as is made clear by the following example:
\(b a ̀=\) used with human reference
Ke=ing a bà=ikáféng.
3SG.NF=the ANIM=tall
'He's tall.'
(also grammatical: Ke ing a ikáféng)
\(b a ̀=\) used with non-human, animate reference
```

Í=ing a bà=ikáféng.
snake=the ANIM=tall
'The snake's really long.'
(also grammatical: Í ing a ikáféng)

```

The use of \(y a=\) with inanimate reference is shown below.
\(y a=\) used with inanimate reference
```

Rítóe=ing a ya=ikáféng.
tree=the INAN=tall
'The tree's tall.'
(also grammatical: Rítóe ing a ikáféng, with no animacy marking)

```

The following three examples, analogous to (116) - (118), show that the choice of \(b a ̀=\) and \(y a=\) on a predicative adjective is not context-dependent, but is set lexically. Using \(y a=\) with an animate argument, or \(b \grave{a}=\) with an inanimate one, is ungrammatical.
(119) * ke ing a ya ikáféng
(120) * í ing a ya ikáféng
(121) * rítóe ing a bà ikáféng

This classificatory use of proclitics to divide the world into animate and inanimate groups is only found with adjectives, though the application of the gender system, and the way it is marked on verbs, also reveals this same division. There is evidence, from preferences in coding predicative adjectives, that a larger system once operated. This is discussed in 10.7.

Another piece of morphology that is unique to adjectives is the semi-frozen suffix \(-f a\), which is not largely productive synchronically, but can only appear on adjectives. Examples of its use can be seen in the following sentences.
(122) Móe nì=láng=ko atáléle(-fa).
fish \(1 \mathrm{SG}=\) chop. \(\mathrm{F}=\mathrm{OBV}\) small-‘ADJ’
'I chopped the fish up into small pieces.'
(123) Móe=wi a atáléle pe=p-áng.
fish=this small 3SG.F=3SG.F-chop.F
'She chopped the fish up into small pieces.'
It might be that the use of \(f a\) with adjectives, indicating perhaps a small clause function, is related to the bound verb root \(f a\) 'use, employ' - see 13.8. More discussion of this affix can be found in the next section.

\subsection*{5.6 Adverbs}

It is not simple to distinguish adverbs from adjectives, and any such differentiation relies more on diachronic than synchronic methodology. The -fa suffix/formative is particularly prominent with modifiers that appear in 'adverbial' functions. The analytical problem is that the \(-f a\), while optional in some environments (such as those detailed in the previous section), is obligatory on most lexical items that can, because of their semantic content, be used as predicate-level adverbial modifiers.

With these predicates the suffix must be thought of synchronically as being truly frozen and no longer productive. Examples of this sort of word include kúkúfa 'quick', láláfa 'slow, repeated', èfa 'ripe' (clearly related to è 'cooked, burned'), fáfà 'open', péfa 'smoked (meat, fish)', bòengfa 'light', háháfa 'slowly, carefully', and rírífa 'short', for which the unaffixed forms *kúku, *lála, * bòeng and *háha are not found. Some other adjectives can appear with or without the suffix, with no apparent change in meaning: these include predicates such as (h)úe, úefa 'old'. These alternations do not correspond to the discourse function of the lexical item in contemporary Skou, but simply reflect the synchronic detritus of what must have been a productive process in pre-Skou.

Adverbs typically appear adjacent to or inside the verb phrase, in the same positions that instruments may appear (see 3.13), most felicitously preverbally (as is also the case with instruments). Examples of adverbs appearing immediately preverbally (really pre-predicate, as an adverb may not intrude between an adjunct nominal and a verb) in both monovalent and bivalent clauses, and also an example of an adverb appearing before the object in a bivalent clause, are shown in (124) - (126).
(124) Pe=angku=ing a kúkúfa pe=w-a tà e tue. 3SG.F=child=the fast 3SG.F=3SG.F-walk running 3SG.F.be 3SG.F.do 'The girl is running quickly.'
\(P e=a n g k u \quad n a k e ́ ~ n a ́ f e n g ~ p e=w-e ́ . ~\)
3SG.F=child dog strong(ly) 3SG.F=3SG.F-get
'The girl held the dog firmly.'
\[
\begin{align*}
& \text { Pe=angku náfeng naké pe=w-é. }  \tag{126}\\
& \text { 3SG.F=child strong(ly) dog } \quad \text { 3SG.F=3SG.F-get } \\
& \text { 'The girl held the dog firmly.' }
\end{align*}
\]

A typical way to code what would be marked with adverbs in many languages is to use a small clause resultative construction in Skou. In the following sentence the small clause yong atáléle is marking the result of the eating ('(only) a little food'), and is preferred to an overt adverbial coding, as in (128) (which is also grammatical, but less frequently heard where a small clause result coding option is available).
\(N i=k\)-ang \(=k o \quad y o n g \quad\) atáléle.
\(1 \mathrm{SG}=1 \mathrm{SG}-\mathrm{eat}=\mathrm{OBV}\) food small
'I only eat a little.'
(literally, 'I eat such that the food is little.')
```

Atáléle nì=k-ang.
small 1SG=1SG-eat
'I only eat a little.'

```

Note that the small-clause construction in (127) cannot be interpreted as a postverbal adverbial. Evidence against this analysis comes from the fact that the first verb is marked with the switch reference clitic \(=k o\), clearly signalling the end of one clause. Further support for the biclausal analysis can be seen when the subject of the small clause is animate, or when the small clause has an inchoative sense. In these cases the adjective/adverb must be marked with proclitic agreement markers (see 7.2.1), an option which is never possible for a word truly functioning adverbially in a preverbal position, as seen in (131).
\(\begin{array}{llll}K e=k-a \text { tà }=k o & \text { tánge } & n a ́ & k e=p i . \\ \text { 3SG.NF=3SG.NF-walk running=OBV leg } & \text { tired } & \text { 3SG.NF=tire }\end{array}\)
'He ran until his legs were tired.'
\(K e=k-a\) tà=ko \(\quad k e=k u ́ k u ́ f a\). 3SG.NF=3SG.NF-walk running=OBV 3SG.NF=fast
'He ran such that he was fast.'
(131)
* ke=kúkúfa \(\quad k e=k-a\) tà
3sG.NF=fast 3SG. \(\mathrm{NF}=3 \mathrm{SG} . \mathrm{NF}-\) walk running
'He ran quickly.'

Many of the words often considered 'adverbial', in that they are clausal adjuncts without clearly referring to any particular nominal with a defined semantic role, are not included in the category 'adverb' here. Lexical or phrasal items denoting time expressions are thus treated as a separate word class, since their behaviour is distinct to that of the words described in this section 5.8 contains a representative list of time expressions.

Another point of note is the fact that there are several other uses of the 'adverbialising' morpheme \(*\) fa. In addition to the (no longer productive) adverbialising functions that have been described here, it is highly likely that the clitic \(=p a\), used to mark an instrumental noun phrase or to show same-subject switch reference between clauses (approximately; see 19.5) is historically related to the same morpheme.

\subsection*{5.7 Numerals}

The counting system of Skou shows a series of bases, most of which revolve around multiples of four. The first base is reached at nápang 'five', which is used to form the numbers up to náhìpa 'eight', but not beyond. Numbers from nine to eleven are formed on the basis of náhìpa plus additions, but then hangpà 'twelve' appears as a new base, rather than running up to the logical ' \(8+7\) ', ' \(2 \times 8\) '. The numbers above twelve are not used very commonly - a glance at the forms in table xx90 shows the cumbersomeness of the Skou forms, compared to the Indonesian numerals. The limit of the Skou counting system is mabiri' 'twenty-four': attempts to elicit 'twenty-five' (and other higher numbers), with forms such as *mabirí pa áling 'twenty-four and one' or *mabírí hì 'twenty-four one' (formed on the basis of the formation of 'six' from 'five' by the putative formative -hì), *mábíríhì 'twenty-four-one', or even less likely forms like * hangpà pa hangpà pa áling 'twelve and twelve and one', or *hangpà pa náhìpa pa nápang 'twelve and eight and five', were all solidly rejected. Attempts to multiply mabírí were also not successful, and the suffering informants explained to me that there was no need to count past twenty-four (if even that far). I do not believe that this is a language death phenomenon, as even speakers who fluently use the language for the majority of their interactions each day insist that it is limited to twenty four. Given that the only likelihood of counting past twenty or so comes with people, and that they will always be split into kin groups or clan groups, the limitation has traditionally of little practical consequence. In the modern world people who deal with larger numbers use Papuan Malay terms.

Perhaps the most surprising feature of the Skou counting system is the composite numeral nápang héngtong 'seven', which is composed of nápang 'five’ and héngtong 'three'. Skou people, when questioned, were quite clear on the meanings of the individual parts of the
compound, but also clear that the compound refers to seven, and not eight. A possible explanation for this mathematical oddity is given below.

Table 90. The Skou numerals (exhaustive)
\begin{tabular}{cllll}
\hline \hline & Skou & & English & Papuan Malay \\
\hline 1 & áling & 1 & one & satu \\
2 & hingtung & 2 & two & dua \\
3 & héngtong & 3 & three & tiga \\
4 & nongpong & 4 & four & ampa(t) \\
5 & nápang & 5 & five & lima \\
6 & nápánghì & \(5+n\) & six & anam \\
7 & nápang héngtong & \(5+3\) & seven & tuju(h) \\
8 & náhìpa & 8 & eight & delapan \\
9 & náhìpa pa áling & \(8+1\) & nine & sambilan \\
10 & náhìpa pa hìngtung & \(8+2\) & ten & sepulu(h) \\
11 & náhìpa pa héngtong & \(8+3\) & eleven & seb(e)las \\
12 & hangpà & 12 & twelve & duab(e)las \\
13 & hangpà pa áling & \(12+1\) & thirteen & tigab(e)las \\
14 & hangpà pa hìngtung & \(12+2\) & fourteen & ampab(e)las \\
15 & hangpà pa héngtong & \(12+3\) & fifteen & limab(e)las \\
16 & hangpà pa nongpong & \(12+4\) & sixteen & anamb(e)las \\
17 & hangpà pa nápang & \(12+5\) & seventeen & tujub(e)las \\
18 & hangpà pa nápang pa áling & \(12+5+1\) & eighteen & d(e)lapamb(e)las \\
19 & hangpà pa nápang pa héngtong & \(12+5+3\) & nineteen & sambilamb(e)las \\
20 & hangpà pa náhìpa & \(12+8\) & twenty & duapulu(h) \\
21 & hangpà pa náhìpa pa áling & \(12+8+1\) & twenty one & duapulu(h) satu \\
22 & hangpà pa náhìpa pa hingtung & \(12+8+2\) & twenty two & duapulu(h) dua \\
23 & hangpà pa náhìpa pa héngtong & \(12+8+3\) & twenty three & duapulu(h) tiga \\
24 & mabírí & 24 & twenty four & duapulu(h)ampa(t) \\
\(25+\) & - & twenty five & duapulu(h) lima \\
& & & (etc.) \\
\hline \hline
\end{tabular}

We can represent the system behind the Skou numeral system as shown in table xx91. The change in counting at each step up is shown in bold, and the start of a new column.

Table 91. Skou bases
\begin{tabular}{|c|c|c|c|}
\hline Increment & Base-5 & Base-8 & Base-12 \\
\hline 1 & 5+1 & 8+1 & 12+1 \\
\hline 2 & ' \(5+3\) ' & \(8+2\) & \(12+2\) \\
\hline 3 & \(=8\) & 8+3 & \(12+3\) \\
\hline 4 & & \(=12\) & \(12+4\) \\
\hline \(=5\) & & & \(12+5\) \\
\hline & & & \(12+5+1\) \\
\hline & & & 12+5+3' \\
\hline & & & \(12+8\) \\
\hline & & & \(12+8+1\) \\
\hline & & & \(12+8+2\) \\
\hline & & & \(12+8+3\) \\
\hline & & & \(=24\) \\
\hline
\end{tabular}

These numbers are those that belong to the class and are used with fixed values, though the higher numbers, hangpà 'twelve', and mabírí 'twenty-four', are often somewhat confused. Many, particularly younger, speakers confuse hangpà with 'ten', a result of inteference from their knowledge of Malay or Indonesian, which has a base-ten system, and reduced fluency with their own base-12. Mabirí is rarely used in practice, and the fact that it is not used in any bases, but is rather an endpoint, means that it is not frequently encountered even in the speech of the older, more fluent, members of the community.

In addition to these numbers there is also nawò 'many, all'. This word, although synchronically felt to be a single unit by Skou speakers, is clearly made up of the morphemes \(n a\) 'flesh (of a fruit)' and =wò 'emphatic clitic', does not have a fixed numerical value. It behaves as a numeral, even though its nearly homonymous partner fátà does not (see 16.3 for a discussion of the unique behavioural properties of fátà).

Many of the numerals in Skou are not cognate with those found in Skou's eastern relatives (for the relationship between these languages, see 1.4 and Donohue 2002b). The typical system from a Skou-family language east of the border can be seen in the following set of numerals from Leitre and Dusur; Wutung shows a system that is more in line with Skou's. (The Serra Hills and Piore River languages, as well as I'saka, all more distantly related to Skou, have base- 2 systems, a pattern which matches the areal patterns shown by their Kwomtari and Torricelli neighbours inland. The use of base-4 systems seems to be a Skou family innovation; the motivation for this is not known, since there are no other languages with base-4 languages in the area.)

Table 92. Numerals in closely related languages
\begin{tabular}{|c|c|c|c|c|}
\hline & Dusur & Dumo & Leitre & Wutung \\
\hline 1 & opa & 吅 & эpa & afe \\
\hline 2 & yumomo & yumono & y m monu & hinyomo \\
\hline 3 & Edu & Enu & ins & heno \\
\hline 4 & now & nue & now & nou \\
\hline 5 & no mle 0 & nuo mbe ofa & noo kia be & noi \\
\hline 6 & no mie yomomo & nue mle yumon & noo kix & notyio \\
\hline 7 & no mle edu & nuo mbe enu & noo ke yomonu & noți nyiu. \\
\hline 8 & buye & nuyu. & noo ke ino & nэtficheno \\
\hline 24 & bupi & mutio恼 & - & - \\
\hline
\end{tabular}

The proto-Skou system was probably base-four, as is reflected in Dusur, and that there has been a shift towards a typologically more widespread base-5 or base-10 system, such as is found in the genetically unrelated languages to the west (Tobati, Sentani), which can be shown to have had a social and linguistic influence on Skou (see chapter 1). This offers some explanation for the odd form for 'seven' in Skou, morphologically madeup of 'five' and 'three'. If the form that is now used with the sense of 'five', nápang, was originally a form meaning 'four', then the use of nápanghéngtong ' \(5+3\) ' to mean 'seven' makes sense, since it would have originally been composed of ' \(4+3\) ', following the patterns seen in the related languages. The cognacy of nápang with the numerals in the other languages is doubtful at best, but the systemic similarities are too great to be ignored.

\subsection*{5.8 Time expressions}

Time expressions appear to belong to a different lexical category to other words byvirtue of their phrase structural possibilities. Some time expressions are themselves composed of several words, and so represent phrasal categories.

Some of the most commonly encountered time expressions are shown in table xx93.
Table 93. Time expressions
\begin{tabular}{lll}
\hline \hline & : translation & \(=\) \\
\hline \begin{tabular}{l} 
ráng \\
rángpang \\
tang
\end{tabular} & 'day, today' & literal gloss \\
\begin{tabular}{l} 
rángleng \\
fetànghapa
\end{tabular} & 'night' & sun \\
ung, ung \(a\) & 'last night' & sun+night \\
lópa & 'morning' & \\
ké & 'now' & sun+afternoon \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline féng langro & 'season with eastern winds, roughly March to October' & \\
\hline fu wa ro & 'season with western winds, heavy waves at sea, approximately November to February' & \\
\hline félangro & 'year' & tomorrow+? \\
\hline fétangpiung & 'in three days' time' & \\
\hline fétanpi & 'the day after tomorrow' & \\
\hline \(f e ́, f e ́=u n g\) & 'tomorrow' & \\
\hline bàng & 'yesterday' & \\
\hline bàngto & 'the day before yesterday' & \\
\hline bàngtoung & 'three days ago, or longer' & \\
\hline ké topu wi a & 'next month' & month+this \\
\hline ké ti fue a & 'last month' & month+go+that \\
\hline félangro a toe & 'next year' & year+come \\
\hline félangro wi a & 'this year' & year+this \\
\hline félangro te & 'last year' & year+go \\
\hline bang áling & 'Monday' & yesterday+one \\
\hline bang hingtung & 'Tuesday' & yesterday+two \\
\hline bang héngtong & 'Wednesday' & yesterday+three \\
\hline bang nongpong & 'Thursday' & yesterday+four \\
\hline bang nápang & 'Friday' & yesterday+five \\
\hline bang nápánghi & 'Saturday' & yesterday+six \\
\hline bang nápang héngtong & 'Sunday' & yesterday+seven \\
\hline
\end{tabular}

The time expressions are normally found unmarked, as the first element of an NP, as in (132). It is also possible to use pronominal clitics with them in order to show inception, a property that they share with adjectives. This is shown in (133).
(132)

b. Rángleng hòe ne=n-ang-nang ti. afternoon sago 1PL=1PL-eat-RED 1PL.do 'We want to eat sago (this) afternoon.'
(133)

Pe=rángpang-pang=pa ne=moe-moe pá ti. 3SG.F=night-RED=INSTR 1PL=return-RED house 1PL.do
'When it's getting on for night, then we want to go home.'
Unlike adjectives there is no question of them appearing with the light verb \(l\), or inside an NP, so the inceptive use of agreement clitics must be regarded as a shared property based on their similar gradable semantic states, rather than being a morphsyntactic fact about word classes.

\subsection*{5.9 Other minor word classes}

We have discussed the major word classes of nouns, verbs, adjectives (including the subclasses found in these groups), as well as the closed group of numerals. Other minor word classes, which may be uniquely defined on morphosyntactic grounds, include:
- pronouns
- place names
- deictics
- interrogatives (epistememes)
- the quantifier

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Section 16.3

Most of these different minor word classes are described in separate sections in other chapters of this grammar; the bound forms of pronouns are the subject of chapter 6 , but also receive more than passing mention in chapters 7 and 12. The place names that were more commonly used at the time of writing are given in 8.7. While the set of place names does represent a (nearly-)infinite set in theory, in practise only a small number of them achieve currency in the community. Deictics, mostly bound, serve a range of functions, and are described in chapter 4. The interrogatives are discussed in Chapter 6 and 18.2, and also, as far as they affect verbal agreement, in 7.2. The only discussion here is that concerning the quantifier fátà 'all'.

Unlike the numerals (see 5.7), the quantifier has the unusual property of appearing outside the NP that it serves to quantify. In order to do this without ambiguity in clauses with more than one NP, there must be strict conditions on the restriction of the quantifier, and these are discussed in 16.3.

\subsection*{5.10 Summary: word classes in Skou}

In this chapter we have seen that there are morphological and syntactic reasons to establish different word classes in Skou, and that these reasons do not need to appeal to any universalist tendencies observed in other languages, but are based on language-internal evidence. In addition to the (cross-lingusitically widely attested) open classes of noun, verb and adjective, and various subdivisions within the first two of these, there are also a range of smaller, less productive word classes. Adverbs are a small class, but whether they are better thought of as being a small, but open class, or a small closed class of words is a moot point.

Other word classes can less problematically be described as closed word classes: these include the pronouns, to be discussed in more detail in the following chapter, demonstratives and other 'semi-bound' markers of pragmatic salience of one sort or another, and numerals. Interestingly the numerals do not combine indefinitely, and are quite definitely restricted to counting up to twenty-four, and not beyond. This is despite having the combinatorial mechanisms and the basic units necessary to count as far as 575 ( \(24 \times 24\), - 1), or even without multiplication certainly \(47(24+23)\).The varied history of the numerals attests to their regrammaticalisation, and the almost total proficiency of Skou speakers in Papuan Malay as a second language means that there are linguistics resources available to them to express themselves numerically above twenty-four. In pre-Malay times they presumably had other means at their disposal for expressing the products of counting inside their own group. The
common proficiency that Skou speakers continue to display in neighbouring languages that possess open counting systems, such as are found in Tobati, might have aided this need.

\section*{6 Pronouns}

Pronominal categories are not complicated in Skou, in the sense that there is not a large number of completely distinct pronominal forms differentiating syntactic or pragmatic functions (such as I and me in English, which share no phonological similarities). On the other hand there are a number of distinct paradigms of the personal pronouns, phonologically only minimally distinct by each morphosyntactically restricted in different ways. Interrogative pronouns are discussed in chapter 18 , while the purely personal pronouns are the subject of this chapter.

\subsection*{6.1 Pronouns sets in Skou}

The several pronoun sets in Skou are built around a core set of distinctions present only in the independent forms. There is plentiful evidence that in the recent past there was only a simple system of free pronouns, and somewhat related verbal prefixes, but that in recent times there has been a period of intense grammaticalisation, resulting in the current profusion of pronominal sets.

Primary among the different sets of pronouns, and showing the greatest number of distinctions, are the free pronouns. Since there are more category distinctions in the free pronouns, and since the other pronoun sets are plainly derived from them in very transparent ways, it makes sense to begin a description of the Skou pronouns with the free forms. Following this, the various bound pronominal sets will be described in 6.3, and then mention of non-personal pronouns in 6.4.

\subsection*{6.2 Free pronouns}

The free pronominals distinguish singular, dual and plural numbers, have three distinct persons, and show gender distinctions, though the degree to which gender is differentiated varies from one number to another in the paradigm. Gender distinctions are limited to third person pronouns in the singular, and in all persons in the dual; gender is not marked at all in the plural. Additionally, the first person shows an inclusive/exclusive distinction in the dual. While all fourteen forms serve as free pronouns, the duals are clearly derived from elements found in the singular and plural pronouns, as will be discussed in this section. The complete set of pronouns is shown in table xx94.

Table 94. Free pronouns


Some unusual points present themselves concerning the arrangement of these pronominal forms:
- there is no gender marking in the plural;
- gender is marked in the third person only for singular pronouns;
- gender is marked on all persons in the duals, except the first person inclusive;
- the inclusive/exclusive distinction is only marked on the first person in the dual.

The first of these points is not surprising, nor the second. The fact that, despite the lack of gender marking in first or second persons elsewhere, and the lack of any gender marking in the plural, all pronouns other than the 1DU.IN show gender distinctions is surprising from a typological perspective, though not irretrievably so (see Schlessinger and Plank 1996 for a survey of unexpected patterns involving gender marking). The lack of an inclusive/exclusive distinction in the plural is also unexpected. The following 'universals' are listed as applying to the question at hand (Plank: Universals Archive).

Universal Number 578
IF a dual and a plural are distinguished in the 1st person exclusive form of a pronoun, THEN they are also distinguished in the inclusive.
Universal Number 716
IF any further grammatical oppositions are expressed in forms marked for dual number, THEN the same oppositions will also be expressed in forms marked for plural number (Uspensky 1968: 9).
The pronouns presented in table xx94 are not marked for any case or pragmatic function, and so can appear in any syntactic or pragmatic role called for. This can be seen in the following four sentences, which show the same pronoun appearing as A, S, P and subject of a nominal clause.

Pronouns as A
(1) \(\boldsymbol{P e}\) nì \(p e=f u\).

3SG.F 1SG 3SG.F=see.F
'She saw me.'
Pronouns as \(S\)
(2) Pe pe=w-a tà.

3SG.F 3SG.F=3SG.F-walk running
'She is running.'

\section*{Pronoun as P}

Ke=naké=ing a pe kóeng ke=ká.
3SG.NF=dog=that 3SG.F tooth 3SG.NF=hit
'That dog bit her.'
Pronoun as subject of nominal clause
\(\boldsymbol{P e} \quad\) pe=ueme-nì=ne.
3SG.NF 3SG.NF=woman-1SG.GEN=1SG.DAT
'She's my wife.'
The dual forms are clearly formed from combinations of the singular and the plural pronouns, with the addition of a formative -na-, independently attested in disjunctive lists of exactly two nominals with the sense 'or' (see chapter 19), and used with the sense of 'dual' here, though most likely related to the conjunction 'and, or, with, other alternative'.
```

e-na-pe
2PL-DUAL-3SG.F
'you two females'

```

The fact that these pronominal elements, such as e and pe in (5) above, can combine, without irreconcilable clashes of features, suggests that the 'plural' set is not in fact explicitly marked as plural, but rather is simply not marked as singular. The pe form simply bears the feature [feminine], with no underlying specification for singular or plural (or even third person). The following features hold for the pronominal formatives:

Table 95. Pronominal features
\begin{tabular}{|c|c|c|c|c|c|}
\hline & PERS \(=1\) & PERS \(=2\) & F & SG & DU \\
\hline nì & + & . & . & + & . \\
\hline mè & . & + & . & + & . \\
\hline ke & . & . & . & . & . \\
\hline pe & . & . & + & . & . \\
\hline ne & + & . & . & - & . \\
\hline e & . & + & . & - & . \\
\hline te & . & . & . & - & . \\
\hline -na- & & . & . & & + \\
\hline
\end{tabular}

This set of features would allow the combinations seen in the duals to take place freely, without leading to parsing violations. The combination of elements that make up the dual pronoun in (5) is as shown below, with no clash of features in the combination.

Table 96. Feature composition for the 2DU.F pronoun
\begin{tabular}{lcccc}
\hline \hline & PERS \(=1\) & PERS \(=2\) & F & SG \\
\hline -na- & \(\cdot\) & \(\cdot\) & \(\cdot\) & \(\cdot\) \\
e- & \(\cdot\) & + & \(\cdot\) & + \\
-pe & \(\cdot\) & \(\cdot\) & + & \(\cdot\) \\
\hline e-na-pe & \(\cdot\) & + & + & - \\
\hline \hline
\end{tabular}

Compare this seamless fit with the rather unwieldy feature clash that would occur if we were to use more traditional, fully specified feature categories with each of these morphemes (feature clashes have been shaded to indicate the problems with this analysis).

Table 97. Attempt at feature composition without underspecification
\begin{tabular}{lcccccc}
\hline \hline & 1 & 2 & 3 & F & SG & DU \\
\hline -na- & \(\cdot\) & \(\cdot\) & \(\cdot\) & \(\cdot\) & \(\cdot\) & + \\
e- & - & + & - & \(\cdot\) & - & - \\
-pe & - & - & + & + & + & - \\
\hline e-na-pe & - & + & - & + & - & + \\
\hline \hline
\end{tabular}

The feature system proposed in table xx 97 will also allow for the fact that the NF forms are used when there is a mix of masculine and feminine items that must all be summed up with one pronominal form. When all the referents are feminine, the feminine forms may be used, but when it is inappropriate to attribute feminine gender to all elements of the entity the unmarked gender forms are used. Compare, for instance, the grammatical use of unmarked gender in (6) with the ungrammatical parsing of feminine gender on the pronoun to summarise the same mix of male and female referents in (7).
\[
\begin{align*}
& \boldsymbol{K} \boldsymbol{e}=\text { angku-nì=ne, } \quad \boldsymbol{p} \boldsymbol{e}=\text { angku-nì=ne, }  \tag{6}\\
& \text { 3SG.NF-child-1SG.GEN=1SG.DAT 3SG.F-child-1SG.GEN=1SG.DAT } \\
& \text { te-na-ke te=te=loeng. } \\
& \text { 3PL-DUAL-3SG.NF 3PL=3PL.go=finish } \\
& \text { 'My son and my daughter, they have both left.' }
\end{align*}
\]
(7) * \(\boldsymbol{k} \boldsymbol{e}\) angku nì ne, pe angku nì ne, tenape te te loeng

Keeping in mind these more appropriate feature categories, I shall gloss simply with PL to indicate the nonsingular category, either two or more than two, in the prime pronouns, NF to indicate ungendered (specifically, not feminine), and 3SG to indicate unmarked number (specifically, not first or second person).

The fact that the more general plural forms can be used in place of the morphologically more highly specified dual forms is taken to reflect not an incompatibility of the glosses with the functions of the pronouns, but rather a realisation of the specific/generic pattern of parallelism in discourse that is common in Skou. The following textual extract (lines 6-7 from the text H òe from appendix 4) show the plural forms used as a general non-singular, even when the reference is clearly to only two referents. Here we can hypothesise that the plural pronouns serve as the more generic version of the nonsingular pronominal sets, while the duals are highly marked not just morphologically, but also in terms of their usage.
\[
\begin{array}{llll}
\text {... tenake te } & \text { hòe-pa, } & \text { te=te } & \text { hòe-pa, ... }  \tag{8}\\
\text { 3DU.NF } & \text { 3PL.go } & \text { sago-water } & \text { 3PL=3pl.go } \\
\text { sago-water }
\end{array} \text { 'the two of them go to the sago swamps, they go to the sago swamps, and ...' }
\]

Here the second reference to the subjects is by regular bound clitic, and there is only a singular: nonsingular distinction maintained for these bound forms (as discussed in the following section). This extract counts as an instance of the generic form serving for the dual, since in the first clause the dual pronoun is used in place of a more generic nonsingular pronominal clitic on the verb. There is no grammatical reason why the whole extract presented above could not have been uttered as shown in (9),
(9) ... tenake te hòe-pa, tenake te hòe-pa,... 3DU.NF 3PL.go sago-water 3DU.NF 3PL.go sago-water 'the two of them go to the sago swamps, they go to the sago swamps, and ...'
with explicitly dual number marked on both verbs, but this is not the option chosen by the speaker, nor is it preferred when presented to speakers. Clearly marking for dual number is not as strongly integrated into the agreement system, even where it is allowed, and stylistically it is not the preferred option. One early use of a dual pronoun, to establish the dual reference, is then followed by a more general use of the generic nonsingular forms.

Another extract (from Te bà pílang te ti e húhú: lines 10-12) shows the same pattern of initial use of a dual pronoun, followed by subsequent marking simply with the generic nonsingular.


While there are three numbers distinguished in free pronouns, only a two-way distinction is made in the bound forms, and this is another reason to suppose that the pronouns glossed as 'plural' are in fact a more generic nonsingular. This is discussed in the following section.

\subsection*{6.3 Bound Pronouns}

The other pronominal sets in Skou are all bound, either prefix, clitic or suffix. In no case do they distinguish dual from plural; only a contrast between singular and nonsingular is marked. This additionally means that gender is only marked in the third person singular, since no plural forms show gender, nor do first and second person in the singular. All but the verbal prefixes are transparently derived from the free pronouns, with some regular phonological changes:
- The dative pronouns uniformly display the vowel [ \(\varepsilon\) ], whereas the prime free pronouns show both (according to the person and number encoded) \([\varepsilon]\) and the high vowel [i];
- The genitive pronouns all appear with a falling pitch; the only exception to this is the 3SG.NF, which occurs with a high pitch. This is not morphologically irregular, as falling pitch cannot occur with a [+high] consonant - see 2.4.1.
- Nominal clitics are identical in form to the prime pronouns.
- The verbal clitics all show (optionally) reduced vowels, except for the 1 SG and 2 SG forms. Thus \(3 \mathrm{SG} . \mathrm{NF}\) is heard as [ pe ] or [ pe ]. In this description they are invariantly written with an e : \(\mathrm{pe}=\), te=, etc.
- The verbal prefixes are the pronominal form that is most divergent from the free pronouns. In most cases they represent simply the initial consonant of the free pronoun, but the 3PL and 1SG display features not seen in modern Skou - the variation between \(\emptyset, k\) and \(n\) in the 1 SG forms reflect irregular developments from Pre-proto-Skou 'Ţi ' 1 SG', and not modern Skou nì, and the 3PL shows a conjugation split which comparative evidence suggests was present in protoSkou. There is, however, one use of prefixes that is not derivable from the free
forms, that being the use of the superficially \(2 \mathrm{SG} \mathrm{m}-\mathrm{V}\) prefix as an interrogative marker - see 7.3.4.
It is altogether plausible to interpret the strong formal similarities between the free form pronouns and the dative and genitive forms as involving, at least historically, a grammatical morpheme (which is, synchronically, perhaps only a formative, part of a non-productive paradigm-like pattern). We can account for these data by assuming, following 2.3.1.8, that the genitive pronouns are formed by the addition of a morpheme (/ formative), 'genitive', [/\], and the dative set if formed by the addition of a frozen dative morpheme, 'dative', \(\boldsymbol{\varepsilon}\), [|-]. The combination of the first person singular pronoun and the dative formative is shown in (11), from (36) in chapter 2 . We can see both the absence of a marked tone melody, and the overwriting of the lexical vowel as well.


The different bound pronouns are shown in table xx98. Most of the paradigmatic sets bear obvious resemblances to the free pronouns, with complications.

Table 98. Bound pronominal forms
\begin{tabular}{|c|c|c|c|c|c|}
\hline & dative & genitive & \(\mathrm{N}(\mathrm{P})\) clitic & V clitic & prefix \\
\hline 1SG & ne & nì & nì & nì & Ø-, k-, n- \\
\hline 2SG & me & mè & mè & mè & m- \\
\hline 3SG.NF & ke & ké & ke, kï & \(k=\) & k- \\
\hline 3SG.F & pe & pè & pe, pir & \(\mathrm{p}=\) & p- \\
\hline 1NSG & ne & nè & ne, \(\mathrm{n}_{\square}\) & nä & n- \\
\hline 2NSG & e & è & e, \({ }_{\text {a }}\) & \(\ddot{\square}\) & \(\emptyset\) - \\
\hline 3NSG & te & tè & te, tor & tis & t-, y- \\
\hline
\end{tabular}

We have already seen that the free pronouns can occur in any syntactic position, serving as subjects, objects, or obliques. The different sets of bound pronouns are used in the following ways:
dative obligatorily suffixed to inalienable nouns (see 5.3, 9.3); with other nouns, it is the second element of possession as an enclitic.
genitive first suffixal element of possession in all alienable possessive; second element in inalienable possession, following a dative.
the genitive+dative morphemes together also serve to mark beneficiary. In some cases (see 9.4.1) the genitive alone may appear. The genitive may be occasionally used with the prominence marker \(=\mathrm{a}\)
to indicate an emphatic pronominal argument, or a salient P in a postverbal position.
\begin{tabular}{ll}
\(\mathrm{N}(\mathrm{P})\) clitic & \begin{tabular}{l} 
used to specify the gender identity of a third person human nouns as a \\
proclitic, or to summarise the person/number/gender information for \\
an ergative NP.
\end{tabular} \\
V clitic & \begin{tabular}{l} 
obligatorily used with all verbal predicates, adjunct nominal predicates \\
or with inchoative adjectival predicates (inchoative nominal predicates \\
require a light verb, which takes the clitic).
\end{tabular} \\
prefix & \begin{tabular}{l} 
prefixal agreement marker on some (most) verbs, fuses with an initial \\
consonant if present to yield irregular conjugations. See 7.2.2.
\end{tabular}
\end{tabular}

The different pronominal forms and functions shown above are described in the sections that follow. It is interesting that the features which we established for the free pronouns are not entirely transferable to the bound pronouns, because of a change in the reference of the third person markers for some inanimate referents, and the particular use of the erstwhile 2 SG m prefix in interrogative clauses.

\subsection*{6.3.1 Genitive and Dative pronouns}

The two pronouns are most frequently found together, with only occasional exceptions arising that see the genitive without the dative. Together they allow for the expression of:
- possessor
- beneficiary

Possession and the beneficiary both show several complications in terms of the ability of the genitive+dative pronouns to express them, and alternative strategies used to express the same functions, depending on various features of the noun that they modify. These complications are described in Chapter 9 'Possession' and Chapter 11 'Non-subcategorised participants'. In this section the basic uses of the two pronoun sets will be illustrated.

Possession
\[
\begin{array}{ll}
\text { Nì yaramenà-ne-nì=ne } & \text { ǹ̀=loe. }  \tag{12}\\
\text { 1SG song-1SG.DAT-1SG.GEN=1SG.DAT } & 1 \text { SG=sing } \\
\text { 'I sang my song.' } &
\end{array}
\]

In this sentence the first pronominal is a free pronoun marking the subject of the sentence. The object nominal yaramenà(ne) is inalienably possessed, and so obligatorily appears with a dative suffix, and is then followed by the genitive and dative combination that marks possession (see 9.1 for more discussion). The verb takes an agreement proclitic, described in 6.3.3 and 7.2.1).

In addition to appearing on a noun to index the person, number and gender features of its possessor, these pronominals may also be used to mark non-possessed beneficiaries.

Beneficiary
Pe hòe pe=tue \(\quad\) e
3SG.F sago 3SG.F=3SG.F.do
ke=bà-ké=ke.
3SG.NF=person-3SG. NF. GEN=3SG. NF.DAT
3SG.F.do
'She's cooking sago for the man.'

In this example the beneficiary is coded as an oblique by its postverbal position, and is further marked for its semantic role by the combination of genitive+dative pronominal affixes on it. Other means of marking beneficiary are to simply code the object of the clause as being possessed by the beneficiary; the morphology employed is then identical to a normal possessive construction:
\begin{tabular}{llll} 
Pe hòe-nì=ne & pe=tue & e & tue. \\
3SG.F sago-1SG. GEN=1SG.DAT & 3SG.F=3SG.F.do & 3SG.F.be & 3SG.F.do \\
'She's cooking sago for me.' & & &
\end{tabular}

Ánì-nì=ne áì nalé lang-ké pe=tue. mother-1SG.GEN=1SG.DAT father taro dish-3SG.NF.GEN 3SG.F=3SG.F.do 'My mother is making pounded taro for Dad.'

This is the normal means of expressing a first or second person beneficiary. More detailed discussion of the means of encoding beneficiaries can be found in chapter 11.

\subsection*{6.3.2 \(N(P)\) clitics}

Pronominal clitics are often found in the NP serving either semantic or syntactic roles. There are two positions in which the \(\mathrm{N}(\mathrm{P})\) clitics can appear, proclitic to a nominal, or enclitic to a whole nominal phrase. They serve different functions in these different positions, and are not mutually exclusive.

When proclitic, the function is to specify a feature of the head noun, typically the gender or plurality (this is described in more detail in 10.5.1). For instance, the noun angku 'child' is not inherently specified as singular or plural, nor masculine or feminine. With a proclitic on the noun, these features can be made explicit, as can be seen in the following set, differentiated only by the pronominal clitic:
\[
\begin{align*}
& \text { angku }  \tag{16}\\
& \text { 'child' } \\
& \text { ke=angku } \\
& \text { pe=angku 'boy' } \\
& \text { te=angku } \\
& \text { 'chil' }
\end{align*}
\]

In these examples the third person singular unmarked, third person singular feminine, and third person plural clitics are used with the noun angku 'child' to give varying semantically explicit readings for which no more explicit term is available lexically in the language. In some cases the use of the proclitic appears redundant, but is nevertheless usual:
\[
\begin{align*}
& \text { pe=ueme 'woman' }  \tag{17}\\
& \text { \# ueme } \\
& \text { * ke=ueme } \\
& \text { te=ueme 'women' }
\end{align*}
\]

Even though ueme has no function with an unmarked singular pronoun, and gains no new semantic content by its appearance with the feminine pronoun, since it is explicitly feminine in its lexical specification, it is normally found with a proclitic. This can be explained by assuming that ueme is lexically specified as female, but lacks the grammatical feature [+feminine], and so
must appear with some means of parsing pronominal features. \({ }^{39}\) This use of proclitic pronouns on nouns appears to be restricted to human nouns, and to very high-animate non-humans (supernatural beings and animals to which gender is being assigned as a discourse priority). Another example, closing the 'set' of typical nouns of human reference, can be seen with bà 'person'. Here we can see that the existence of pe=ueme 'woman', with the highly specified root ueme, means that the feminine clitics are not normally used with bà, which only has male reference when explicitly so marked with a clitic.
```

    ke=bà 'man'
        bà 'person'
    
# pe=bà

    te=bà 'people'
    ```

The three lexical items angku, ueme and bà seen in (16) - (18) show us the range of possibilities for overt gender specification on nominal roots. In the case of angku there is no predetermined lexical preference for feminine or non-feminine gender, with either singular clitic being able to appear with the root. U eme is specified as having feminine reference, but still requires the presence of a feminine clitic to realise that gender. Since the root is specified as only being compatible with feminine gender (as evidenced by the female interpretation of the plural te \(=\) ueme as 'women', even though the clitic does not provide any specified gender), it cannot appear with the non-feminine clitic \(\mathrm{ke}=\). Finally bà is not lexically specified as either feminine or non-feminine, but because of the existence of a more highly marked form in pe=ueme, which is already semantically (though not morphologically) feminine, \#pe=bà is blocked from appearing, while ke=bà is acceptable. In the plural form te=bà is allowed, though it does not have a lexically-specified feminine or non-feminine reading.

The same set of clitics may be used as enclitic to the whole NP. In this case they indicate explicitly the gender of the NP as a whole, and also that the NP is the A of a bivalent clause, as in the following example:
\begin{tabular}{lll} 
Naké & ke & hang \\
dog & 3se=k-ang. \\
'(The) dog ate a coconut.' & &
\end{tabular}

When serving as an S or a P , the NP enclitic may not be used. (21) shows the ungrammaticality of summation pronoun in an monovalent clause, while (23) and (24) show that in a bivalent clause the summation pronoun is only acceptable on the A NP, and is ungrammatical on a \(P\).
Naké pa \(\quad\) ke=pi pa-lóng
dog water \(3 \mathrm{SG} . \mathrm{NF}=\) swim river-gap
'(The) dog swam in the river mouth.'
(21) * naké ke pa ke pi palóng
Naké ingéong kóeng ke=k-ang.
dog cat tooth 3SG.NF=3SG.NF-eat
'(The) dog bit a cat.'
(23) * naké ingéong ke kóeng ke kang

\footnotetext{
39 Not necessarily simply the feature [+ feminine], parsed by the 3SG.F pronoun. There are textual examples of this noun appearing with, for instance, a 1PL pronoun (see appendix 4).
}
(24) Naké ke ingéong kóeng ke kang.

The ungrammaticality of (21) and (23), which show a summation pronoun on the S and P NPs respectively, shows us that the enclitic position for an \(\mathrm{N}(\mathrm{P})\) clitic is available for nominals in the syntactic role of A alone, and so can best be characterised as an (optional) ergative marker.

I propose that this ergative marker has its origins in the useage, not uncommon in many languages of New Guinea, of coreferring a topical argument with a coreferent pronoun in the clause. Since the typical clause-internal case marking pattern for New Guinea languages is an ergative one (see Donohue 2005xxxx), we would find the following coding alternations for basic bivalent clauses:
\begin{tabular}{|c|c|c|c|c|}
\hline & TOPIC & SUBJECT & OBJECT & VERB \\
\hline a. & - & \(\mathrm{NP}_{\mathrm{A}}\) ERG & \(\mathrm{NP}_{P}\) & V-AGR \({ }_{\text {A }}\) \\
\hline b. & \(\mathrm{NP}_{\mathrm{A}}\) & & \(\mathrm{NP}_{\mathrm{P}}\) & V-AGR \({ }_{\text {A }}\) \\
\hline c. & \(\mathrm{NP}_{\text {P }}\) & \(\mathrm{NP}_{\text {A }}\) ERG & & V-AGR \({ }_{\text {A }}\) \\
\hline d. & \(\mathrm{NP}_{\text {A }}\) & \(\mathrm{Pro}_{\mathrm{A}}\) ERG & \(\mathrm{NP}_{P}\) & V-AGR \({ }_{\text {A }}\) \\
\hline
\end{tabular}

With a growing predominance of the topic-coding patterns, and the pattern shown in (25)d becoming favoured over that in (25)b in order to preserve consistent ergative case marking in the sentences, we can imagine the ergative-marked pronoun being reanalysed as a unit. In fact, given that disambiguation is only necessary for third persons (because of sufficiently individual agreement morphology on the verb), the presence of the pronoun alone is enough to mark the A of the clause. This would lead to an intermediate stage, seen in (26).
\begin{tabular}{lcccc} 
& TOPIC & SUBJECT & OBJECT & VERB \\
a. & \(\mathrm{NP}_{\mathrm{P}}\) & \(\mathrm{NP}_{\mathrm{A}}\) Pro \(_{\mathrm{A}}\) & & V-AGR \(_{\mathrm{A}}\) \\
b. & \(\mathrm{NP}_{\mathrm{A}}\) & Pro \(_{\mathrm{A}}\) & \(\mathrm{NP}_{\mathrm{P}}\) & V-AGR \(_{\mathrm{A}}\)
\end{tabular}

From these patterns, it is a short step to reanalyse the basic clause along the template seen in (26)b, at which point it replicates the pattern in (25)a, but has transferred the case marking burden from a dedicated ergative case marker to an NP-enclitic use of the pronouns.
\begin{tabular}{lcccc} 
& TOPIC & SUBJECT & OBJECT & VERB \\
a. & - & NP \(_{A}\left(\operatorname{Pro}_{\mathrm{A}}\right)\) & \(\mathrm{NP}_{\mathrm{P}}\) & V-AGR \(_{\mathrm{A}}\) \\
c. & \(\mathrm{NP}_{\mathrm{A}}\) & & \(\mathrm{NP}_{\mathrm{P}}\) & V-AGR \(_{\mathrm{A}}\) \\
b. & \(\mathrm{NP}_{\mathrm{P}}\) & \(\mathrm{NP}_{\mathrm{A}}\left(\operatorname{Pro}_{\mathrm{A}}\right)\) & & V-AGR \(_{\mathrm{A}}\)
\end{tabular}

A second use of NP-final pronouns is found in Skou, in which a pronoun 'sums up' the person, number and gender features of the whole (conjoined, either overtly or covertly) NP. This is not the same usage as the ergative enclitic seen above, in that it can function on nonergative NPs, and it includes any free pronoun, particularly the duals as well as the prime pronouns, as can be seen in the following:

yu-ne-nì=ne tenake ke=fi.
brother-1SG.DAT-1SG.GEN=1SG.DAT 3DU.NF 3SG.NF=meet
'He met my brother and sister.'
In this example tenake serves to sum up the person (third), number (dual) and gender (not completely feminine, therefore unmarked) of the conjoined NP. This pronominal bundle is not the bound pronominal clitic on the verb, as it appears in the dual form, which are only found as free pronouns.

Compare the sentence above with a free pronoun and a conjoined NP with the ones below, which have a bound ergative NP-clitic, which is from the set of prime pronouns even when referring to a dual number. When the two referents of the subject NP are expressed by just one noun, this is the only way a NP-final pronominal may appear.
```

Te=bahúe-nì=ne hìngtung te
3PL=elder.sibling-1SG.GEN=1SG.DAT two 3PL.ERG
ke te=fi.
3SG.NF 3PL=meet
'My elder (brother and sister) met him.'
(30) * te bàhúe nì ne hìngtung tenake ke te fi

* te bàhúe nì ne tenake ke te fi

```

When the two referents bearing the subject function are expressed by two nouns in conjoined NPs, either the ergative clitic option or the summarising free pronoun option may be used. In the first of the sentences below the clitic te 3 PL is used, despite the fact that the NP refers to only two participants; this is an ergative marker, and cannot be a summarising clitic. In the second example the dual pronoun tenake is used, which could be used for any NP regardless of its syntactic role.
\begin{tabular}{lll}
\begin{tabular}{l} 
Yá-né-nì=ne,
\end{tabular} & \begin{tabular}{l} 
yu-ne-nì=ne \\
sister-1SG.DAT-1SG. GEN=1SG.DAT \\
ke \(\quad\) te \(=\) fi.
\end{tabular} & te \\
brother-1SG.DAT-1SG.GEN=1SG.DAT & 3PL.ERG \\
3SG.NF 3PL=meet & & \\
'My brother and sister met him.' & &
\end{tabular}

\section*{Yáne nì ne, yune nì ne tenake ke te fi.}

Further details on the syntax of conjunction, and the function of special reduced forms of the dual pronouns in these constructions, can be found in chapter 19.

\subsection*{6.3.3 Verbal clitics}

All verbs show agreement for their subject by overt pronominal clitic. \({ }^{40}\) The position of these clitics is not entirely predictable: while the clitic always follows an object or instrument in the clause, and usually intrudes between an adjunct nominal and the inflecting verb, there are some cases in which the adjunct nominal follows the clitic, and there are yet other cases in which there is variation in the position of the clitic.

The following examples are fixed in the order of the clitic. With ku li 'give birth', the clitic must occur directly on the verb, and the adjunct nominal cannot intrude (this is the most frequently attested position for a clitic in an adjunct nominal construction. With lú weng, on the other hand, the clitic must precede the adjunct nominal.
\[
\begin{align*}
& \text { [adJ.N ] clitic=[v ] } \\
& \text { ku pe=tue }  \tag{34}\\
& \text { child 3SG.F=3SG.F.do } \\
& \text { 'she gave birth' }
\end{align*}
\]

\footnotetext{
40 With a few exceptions - see 7.2.1.1.
}
(35) * pe=ku tue
clitic=[ADJ.N] [v ]
pe=ló weng
3SG.F=eye.F sleep
'she slept'
(37) * ló pe=weng

The next examples show that for some predicates we find variation in the positioning of the clitic with respect to the adjunct nominal and verb: the clitic may either precede or follow the adjunct nominal.
```

[ADJ.N] clitic=[v ]
nà pe=òe
play 3SG.F=play
'she played'
clitic=[ADJ.N] [v ]
pe=nà oe
3SG.F=play, play
'she played'

```

The meaning of the predicate does not directly dictate the location of the clitic in the predicate, as the following paraphrase of the above sentence 'she played' shows. Although the (reported) meaning of (40) is identical to that of (38) and (39), only one position for the clitic is grammatical, as seen in the ungrammaticality of (41).
[ADJ.N] clitic=[v ]
nà pe=tue
play 3SG.F=3SG.F.do
'she played'
clitic=[ADJ.N] [v ]
(41)
* pe=nà tue

The appearance of the verbal clitic is obligatory, regardless of the presence or absence of any other verbal agreement morphology, as discussed in more detail in 7.6. In the example below we can see that the person, number and gender of the subject 'uncles' is clearly retrievable from the NP te kóko nì ne, yet it must still be marked on the verb by means of the proclitic.

Verbal clitic as sole agreement marker
\begin{tabular}{lll} 
Te=kóko-nì=ne & nì & te=fí. \\
3PL=FyB-1SG.GEN=1SG.DAT & 1SG & 3PL=meet
\end{tabular}
'My uncles met me.'
In the following example the verb is fully marked for person, number and gender of this subject by prefixation, but still the proclitic is obligatory:

Verbal clitic appearing in conjunction with other agreement marker(s)
Te=koko-ni=ne
móe te=t-ang.
3PL=FyB-1 SG.GEN=1SG.DAT
fish 3PL=3PL-eat
'My uncles ate (some) fish.'

The status of the verbal clitics, as well as the other agreement markers, is addressed in 7.3.
An alternative to the proclitic coding option on an NP for the subjects of bivalent verbs is to mark the gender by means of the ergative clitics (summation pronouns) at the end of the NP, rather than, or in addition to, gender-marking proclitics. The various options are shown in the following sentences, from most to least 'natural':
Naké ke
dog \(\quad\) 3SG.NF.ERG
fish
ke=k-ang.
\# Ke naké móe ke wé ti ko ke kang.
(46) ?/\# K e naké ke móe ke wé ti ko ke kang.

Here the gender of the dog is indicated by the pronoun ke at the end of the nominal phrase, which is more normal than a proclitic (\# ke=naké) would be, given the non-human nature of a dog. This is not to say that ke=nake is ungrammatical, as it would be a perfectly acceptable way to refer to a dog embodying supernatural properties, or one possessed by a spirit, in which case the level of animacy would be high enough to allow human-type reference by means of proclitics.

\subsection*{6.3.3.1 Interrogative clitics}

Just as the basic pronouns can all be used in clitic form on the verb, indexing the pronominal features of the subject, so too can the animate interrogative pronoun also be used as a verbal clitic when the subject of the sentence is not identified, and this construction serves as one way of questioning a subject.

The basic construction for a question about the identity of an animate subject in Skou has no particular differences from the normal word order encountered in declarative clauses, as can be gauged by comparing (47) with any of the declarative clauses scattered throughout this book (or, for explicit discussion, see 4.3).
```

Bá hòe-nì=ne ke=k-ang?
who sago-1SG.GEN=1SG.DAT 3SG.NF=3SG.NF-eat
'Who ate my sago?'

```

While it is not ungrammatical, it is certainly unusual and for some speakers infelicitous to use the feminine clitics on the verb to refer to an interrogative pronoun. Plural marking, on the other hand, is more generally accepted, but is still less likely to be used than the 3SG.NF clitics.
\[
\begin{array}{lll}
\text { \#/? Bá hòe-nì=ne } & \text { pe=p-ang? } \\
\text { who sago-1SG.GEN=1SG.DAT } & \text { 3SG.F=3SG.F-eat } \\
\text { 'Who }
\end{array}
\]

The conditions under which the feminine clitic and agreement prefix may be used are restricted: the situation must be one in which the question-posing speaker knows that the only possible subjects (such as the sago-eaters in the examples above) must be either female of a group. In the absence of this certainty on the part of the questioner, the unmarked prefixes based on the
singular non-feminine (see 7.2 for the feature analysis that places the non-feminine as the leastmarked pronominal set).

The second way of forming questions involves the verbal prefixes following the pattern seen above, but using a verbal clitic based on the interrogative pronoun. In this case the interrogative pronoun does not appear independently:
\[
\begin{array}{ll}
\text { ( } * \text { bá ) hòe-nì=ne } & \text { bá=k-ang? }  \tag{50}\\
\text { who sago-1SG.GEN=1SG.DAT who=3SG.NF-eat } \\
\text { 'Who ate my sago?' }
\end{array}
\]

This analysis is not the same as positing a preverbal focus position, with an inverted OSV word order. The bá \(=\) in the example above is not an independent word, but rather a bound clitic, and so the only phrasal constituents are P and V . This will be discussed further in 8.3.4 and 18.2.

One final complication about the marking of interrogative subjects is an extra elaboration on the above pattern. When the interrogative pronoun is used as a verbal clitic, either the 'normal' 3SG.NF set of prefixes may be used on the verb, as in the previous example, or else an alternative verbal prefix may be used. This alternative prefix takes the underlying shape of an m - (though showing all the morphophonological variation expected of this inflection - see 7.2.2). This is identical in form to the 2 SG prefixal forms, and its use can be seen in (51).
(51) Hòe-nì=ne bá=m-ang?
sago-1SG.GEN=1SG.DAT who=2SG?-eat
'Who ate my sago?'
This use of apparently 2 SG subject inflectional prefix (but not the 2 SG inflectional proclitic) on a content question initially appears to be an odd strategy. It might be thought, based on an analogy with the optional use of 3SG.F or 3PL forms on the verb in questions when we wish to delimit the set of questioned participants, that this is a form of question that is asking (in the above questions) which of the addressees ate the sago. The flaw in this argument is that the prefix used is identical in form to the SINGULAR, not the plural, prefix, and so would not be appropriate for questioning a group (and of course a true content question about the identity of the subject cannot be formed with only one possible (assumed) subject). \({ }^{41}\)

Furthermore, questions formed with the specific interrogative clitic bá= and lacking a verbal prefix (as is appropriate for a 2PL subject, and for most 1SG subjects), are not grammatical, as seen in (52) (compare to the fully acceptable (46), which has a prefix identical to the normal subject-marking 2 SG prefix on the verb).
(52) * hòe-nì=ne bá=[Ø]-ang?
sago-1SG.GEN=1SG.DAT who=[2PL]-eat
'Who of you lot ate my sago?'
While this interrogative agreement is highly unusual, the distantly related I'saka language (see 1.4 for a discussion of the relationship) shows an identical pattern of questioned subjects being marked on the verb by forms identical to the 2 SG inflectional paradigm, though in I'saka this is the only way to form a question (Donohue and San Roque 2004). Unlike the other verbal clitics, which may also be used as nominal clitics to specify gender on some nouns, this is not possible for bá \(=\); that is, there are no grammatical forms such as that in (53),

\footnotetext{
41 Indirect speech acts, such as a scolding mother speaking to her child and saying "I wonder who ate all the biscuits, hmm?", are not a feature of Skou speech acts.
}
```

* bá=ueme pe=toe?
who=woman 3SG.F=3.come
'Which woman came?'
(cf., Peueme pe toe? 'Has the woman come?')

```
in which the interrogative clitic replaces another pronominal clitic on a nominal, in the above example \(\mathrm{pe}=\) from \(\mathrm{pe}=u\) ume. Even in the case of nouns that only optionally appear with genderspecifying pronominal clitics, it is not possible for the interrogative to appear:
* bá=naké hòe ke=k-ang?
who \(=\) dog sago 3 SG.NF=3SG.NF-come
'Which dog ate the sago?'
(cf., Naké hòe ke kang? 'Has the dog eaten the sago?', and also Ke naké hòe ke kang? 'Has the male dog eaten the sago?' and Pe naké hòe pe pang? 'Has the female dog eaten the sago?)
\begin{tabular}{|c|c|c|c|c|c|}
\hline Ánì, & mè & nalé & \(1 a n\) & bá-ké & mè \(=\) pi \\
\hline mother & 2SG & taro & dish=DEIC & who-3SG.NF.GEN & \(2 \mathrm{SG}=2 \mathrm{SG}\).do \\
\hline me & pi? & & & & \\
\hline 2SG.be & 2 SG . & & & & \\
\hline 'Mothe & who & you & making the p & ded taro dish for?' & \\
\hline
\end{tabular}

More details on the I'saka patterns can be found in Donohue and San Roque (2004). A more general discussion of interrogative constructions, subsuming this particular discussion of questioned subjects and their verbal indexing, can be found in 17.2.

\subsection*{6.4 Non-personal pronouns}

Apart from the personal pronouns described in this chapter, there are also pronominal forms that, in terms of frequency of use at least, serve a primarily interrogative function. Interrogatives in Skou form a word class that is better termed episteme (after Mushin 1995), in that they are used not only for questions, but also for generic reference (anyone, anything, something). Furthermore, this class of words serves, by means of the different morphology or lexical form used, to separate the world into different emic categories, which correspond to the word classes or subclasses established elsewhere in the language(see chapter 5). The human interrogative pronoun shares some properties with the personal pronouns described here in that it also has a clitic form as well as a free form.

In addition to the non-personal interrogative pronouns we also find deictic pronouns, which are formally identical to the locative and referential demonstratives, and which are discussed in 4.5. These do not have the same option of appearing as an NP-final clitic, summarising the pronominal features of the NP, nor can they appear cliticised to nouns or verbs.

\section*{7 Verbs}

This chapter primarily describes the agreement morphology which is found on the verb and its status, as well as the morphological means employed for marking tense/aspect/mood. The structure of the verb phrase, and the arguments used to establish the constituents posited, can be found in chapter 3, and is assumed here. Other predicate-deriving processes are detailed in chapter 13 , while the adjunct nominal construction is the subject of chapter 14 , and predicates with clausal complements are examined in chapter 15.

\subsection*{7.1 The verbal template}

The total amount of possible morphology on the verb is considerable, though in practice most verbs appear with just pronominal agreement markers (for subject or, exceptionally, object). Additional morphology that can appear is in the nature of tense and aspect marking, which is non-concatenative, and the use of auxiliary verbs, also with an aspectual function. The position of the adjunct nominal, if any, is also a variable that needs to be stipulated lexically (see chapter 14).

The verb itself can be described with the following template (including clitics, though these can be separated from the verb by some adjunct nominals; see 7.8 and 14.5):

Morphological template for the inflected verb in Skou
(1)


APPL \(\rightarrow\) applicative suffix
\(\mathrm{CL} \quad \rightarrow\) clitic
PREF \(\rightarrow\) pronominal prefix
RED \(\rightarrow\) reduplication on verb root marking aspect
FEM \(\quad \rightarrow\) vowel alternation marking singular feminine (animate),
PL \(\quad \rightarrow\) vowel alternation marking plural (animate)
TNS \(\rightarrow\) tone suppletion on verb root marking tense
Some examples of verbs illustrating various of these morphological devices can be seen in the sentences in (2) - (6).

Simple verb with clitic and prefixal agreement
(2)

M è=m-í.
2SG=2SG-westwards
'You go west!'
Verb with reduplication
(3)

M è=m-í-mí.
2SG=2SG-westwards-RED
'You will go west.'
Verb with tonal stripping
(4) \(M\) è \(=m-i_{L}\).

2SG=2SG-westwards<LOW.TONE>
'You went west.'
Verb with applicative (and goal inside VP)
(5)

M è=e \({ }_{L}\)-na Te Bapúbi.
2SG=board-APPL Skou Sai
'You boarded (a vehicle to go) to Skou Sai.'
Verb with vowel alternation (and ex-VP location)
(6) \(\mathrm{Pe}=\) mong Te Bapúbi.

3SG.F=F.sit Skou Sai
'She stayed at Skou Sai.'
The verbal structure seen in (1) appears inside a V' unit, which can, in addition to the verb, also accommodate an adjunct nominal or another part of a verbal collocation. If there is an adjunct nominal, it can appear either before or after the verb. If the adjunct nominal comes before the verb, then there are some cases in which the proclitic agreement marker appears outside the adjunct nominal; this is determined lexically.

Syntactic template for the V' constituent in Skou
)
\[
\mathrm{V}^{\prime} \rightarrow\left\{\begin{array}{l}
\mathrm{CL}=\quad \text { AdjN [affixed verb] }  \tag{7}\\
\text { AdjN CL=[affixed verb] } \\
\mathrm{CL}=[\text { affixed verb] AdjN } \\
\\
\mathrm{CL}=[\text { affixed verb] [affixed verb] }
\end{array}\right]
\]

Abbreviations as for (1), with the addition of:
AdjN \(\quad \rightarrow\) adjunct nominal
Some examples of sentences exemplifying these possibilities are shown in (8) - (11):
V' with preverbal AdjN and V
```

Pe=angku=ing a [vp[v` pa pe=hí ] ].
3SG.F=child=the water 3SG.F=wash
'The girl washed.'

```

V' with preverbal AdjN and V; clitic precedes the \(\operatorname{AdjN}\)
(9) \(\mathrm{Pe}=\) angku=ing a \(\quad[v p\) ke=yu-pe-pè=pe

3SG.F=child=the 3SG.NF=brother-3SG.F.DAT-3SG.F.GEN=3SG.F.DAT
[ \(\mathrm{v}, \mathrm{pe}=\) na r -ùng ] ].
3SG.F=teaching 3SG.F-teach
'The girl washed.'
V' with postverbal \(\operatorname{AdjN}\) and V
(10)
\(\mathrm{Pe}=\) angku=ing a \(\quad[\mathrm{vP}[\mathrm{v}, \mathrm{pe}=\mathrm{w}-\mathrm{a}\) ta \(]]\).
3SG. \(\mathrm{F}=\mathrm{child}=\) the \(\quad\) 3SG. \(\mathrm{F}=3\) SG.F-walk running.
'The girl ran.'
V' with collocationary \(\mathrm{V}+\mathrm{V}\) construction
(11)
\(\mathrm{Pe}=\) angku=ing a \(\quad\left[\mathrm{vp}\right.\) ya \(\left[\mathrm{v}^{\prime} \quad\right.\) pe=w-á \(\left.\left.\mathrm{w}-\mathrm{i}\right]\right]\).
3SG. \(\mathrm{F}=\) child=the \(\quad\) thing \(\quad\) 3SG. \(\mathrm{F}=3\) SG.F-count 3SG.F-count
'The girl counted things.'
The V' unit which we have seen above in turn fits into a complete VP in a way that may be represented templatically as shown in (12). Here we can see that the \(\mathrm{V}^{\prime}\), with clitics, is iterative, allowing for serial verb constructions. The presence of a nominal object, however, is restricted to VP-initial position, and the aspectual auxiliaries are differentiated from other serialised verbs by their unique possition.

Template for the VP in Skou
(12)
\[
\mathrm{VP} \rightarrow \mathrm{NP}_{\mathrm{P}} \quad\left\{(\mathrm{VP} / \mathrm{CL}=)_{0}^{1} \quad \mathrm{~V},\left.\right|_{]_{1}} ^{\mathrm{NP}_{\text {GOAL }}^{2}} \quad \mathrm{AUX}\right.
\]

The additional abbreviations used here are:
AUX \(\quad \rightarrow\) li 'do', ili 'be' + 'do', li ‘do'
\(\mathrm{CL}_{\alpha} \quad \rightarrow\) clitic; only if no clitic on the affixed verb
\(\mathrm{NP}_{\mathrm{P}} \quad \rightarrow\) NP object
\(\mathrm{NP}_{\text {GOAL }} \rightarrow \mathrm{NP}\) goal (or postverbal A or P coded as goal)
VP/CL \(\rightarrow\) VP without a pronominal clitic
The expansion of the VP to include an NP serving as the P of the clause, or a goal, is unproblematic. The appearance of the auxiliaries as tense-aspect markers is discussed in 7.9, and the appearance of additional VP-like units (the [ \(]_{1}^{2}\) unit in (12)) is included to account for serial verb constructions, the subject of chapter 12. The adjunct nominal constructions are discussed in chapter 14. Some examples of some of the possibilities can be seen in (13) - (15).

VP with \(P\) and \(V\)
\(\mathrm{Pe}=a n g k u=i n g\) a [vp móe \(p e=p-a n g\) ].
3SG.F=child=the fish 3SG.F=3SG.F-eat
'The girl ate a fish.'
VP with V and auxiliaries
(14)
\begin{tabular}{|c|c|c|c|}
\hline \(\mathrm{Pe}=\) angku=ing a & & e & \\
\hline 3SG.F=child=the & 3SG.F=3SG.F & 3SG & 3SG.F.do \\
\hline
\end{tabular} 'The girl is walking.'
\begin{tabular}{|c|c|c|c|c|}
\hline \multicolumn{5}{|l|}{VP with P, Adj N and V} \\
\hline \[
\begin{align*}
& \text { Náke=ing a } \begin{array}{l}
\text { [vp móe } \\
\text { dog=the } \\
\text { 'The dog bit a fish.' }
\end{array} \tag{15}
\end{align*}
\] & \multicolumn{4}{|l|}{[ v kóeng pe=p-á ] ]. tooth 3SG.F=3SG.F-hit} \\
\hline \multicolumn{5}{|l|}{VP with multiple Vs} \\
\hline [ \(\mathrm{vp}^{\text {M M óe }}\) [ v , ke=ké & k-á & moe & ti ] & pá ]. \\
\hline fish 3SG.NF=get & t 3SG.NF-carry & return & 3SG.NF.go & house \\
\hline
\end{tabular}

The primary, and most regular, morphological complication on the verb involves agreement of different sorts. We have seen instances of agreement for subject in the examples above, by clitic, prefix and vowel alternation, but there are further complications beyond this simple listing. Because agreement is an all-pervasive aspect of the verb in Skou, it is dealt with in the first of the sections that follow, followed by a discussion of the syntactic status of the agreement markers in the language. After discussing the various irregularities in verbal agreement in Skou, both internally and in comparison to related languages, and details of the verbal collocations alluded to above, the tense/aspect/mood system is presented, with a summary of the chapter to finish. Other following chapters with a large amount of content relevant to a discussion of verbs and verbal constituency are Chapters 12, 13 and 14, dealing with Serial verbs, Valency-changing processes, and Adjunct nominal constructions, respectively.

\subsection*{7.2 Verbal agreement}

There are four ways in which person, number and/or gender features of subject or object may be indexed on the verb. These can sometimes be found marking different categories, such as subject and object. More commonly, however, more than one of these marking strategies is used to show multiple exponence of the same grammatical category, subject. The four morphological means employed are:
- proclitic to the verb to mark subject;
- prefix on the verb to mark subject;
- vowel shift to mark a feature of the subject or object;
- suppletion of the verb stem to agree with the subject or object.

The different morphological strategies, and the conditions on their selection, where this can be stated, will be examined one by one in the following sections.

\subsection*{7.2.1 Proclitic agreement}

All verbs are mark their subject by a proclitic. This indexes the prime pronominal features of the subject, and typically appears between an adjunct nominal and the verb.

The proclitics differentiate gender only in the third person singular, and distinguish only two numbers, singular and non-singular. The forms have already been described in 6.3, and are set out again in table xx 99 . In all cases the proclitic has the same form as the free pronoun, with the optional change of an \(\varepsilon /\) vowel to \([\exists]\) in the clitic.

Table 99. Pronominal clitics
\begin{tabular}{|c|c|c|}
\hline & SG & PL \\
\hline 1 & nì- & ne-, ni- \\
\hline 2 & mè-, ṁ̇- & e-, - - \\
\hline 3.NF & ke-, pr- & te-, tio- \\
\hline 3.F & pe-, \(\mathrm{p}_{\text {- }}\) - & \\
\hline
\end{tabular}

Although proclitic agreement is obligatory for all verbs, whether finite or non-finite, predicative or attributive, it is not entirely restricted to that word class. Verbs always mark their subject with a proclitic, whether referential, attributive or predicative. However, proclitic agreement is also found attached to the following non-verbal predicates:
- adjectives with an inchoative sense;
- adjunct nominal (+ inflecting verb as a complex predicate)
- predicative nominal (+ inflecting verb as a complex predicate) with an inchoative sense
When attributive, adjectives do not require a proclitic, and when denoting a state adjectives appear without a clitic (though the preferred way for an adjective to appear predicatively is for it to modify a predicative nominal - see 5.5). Compare the following sentences, both using the same subject and the same predicate; when the predicate is durable, stative and invariant, the adjective appears without any verbal proclisis. On the other hand when the aspect of the situation calls for an inceptive, non-static change, all processes better associated with prototypical verbs than with adjectives, then we see the appearance of verbal proclitics on the adjectival stem.

Stative adjective predicate
Péngue=ing a òe. mango=the ripe 'The mango is ripe.'

Inchoative adjective predicate
(18) Péngue=ing a \(\mathrm{ke}=\) òe. mango=the 3 SG.NF=ripe 'The mango has become ripe.'
It is not unusual for proclitics to appear as well as free pronouns, though first and second persons, especially non-dual, are often represented by the clitic alone (see 7.3.1). The only other instance of a word class that optionally appears with proclitics involves time expressions, which, as discussed in 5.8 , may appear with clitics in precisely the same aspectual environment: when they describe the inception of a state, rather than the state itself.

There is just one circumstance in which proclitic agreement is not obligatorily found on verbs. This is not a morphosyntactic restraint, but rather a phonological one, as I shall demonstrate in the following section.

\subsection*{7.2.1.1 Exceptions to the obligatoriness of agreement: the lack of proclitic agreement}

There are four circumstances in which the normally obligatory verbal proclitic can be omitted from the clause. In all cases it is possible, and grammatically unmarked, for the proclitic to appear, but not usual; in one case there is a meaning difference associated with the presence or absence of the clitic.

The first exception to obligatory procliticisation is found when a clause consists of a dual pronominal subject in an monovalent clause with no adjunct nominal. In this environment proclitic agreement may be dropped, though it appears that this does not apply equally to all dual subjects.

Recall that there is an asymmetry in the function of pronouns, in that first and second persons are more likely to appear only as clitic on the verb, where third persons are more likely to be represented as both independent pronoun and bound clitic (see 7.3.1). The following sentences illustrate the normal appearance of an independent pronoun with a third person subject, and the normal appearance of no independent pronoun with a first person subject. The opposite arrangement is asymmetrical: the lack of an independent pronoun for a third person subject is at best infelicitous, but the presence of an independent pronoun for a first person is acceptable. This pronoun is not a topic, since it lacks the intonation break that is obligatory with core arguments serving as topics, and lacks the near-obligatory use of the deictic a with topic pronouns. (See 3.1.1 and 4.2.1 for more discussion on topic-marking.)
(19) Pe móe \(\mathrm{pe}=\mathrm{p}\)-ang.

3SG.F fish 3SG.F=3SG.F-eat
'She ate (some) fish.'
(19)' \# M óe pe pang.

Móe nì=k-ang.
fish \(1 \mathrm{SG}=1 \mathrm{SG}\)-eat
'I ate (some) fish.'
(20)' Nì móe nì kang.

When the subject is dual in number, the use of a free pronoun as well as the clitic is more likely, even with first and second person subjects, as can be seen in the following sentences. This is simply because the free pronouns present a greater informational content than the clitic pronouns, which do not have dual forms (see 6.3).

Enake móe \(e=a n g\) ná?
2DU fish \(2 \mathrm{PL}=\) eat \(\mathrm{Y} / \mathrm{N}\)
'Did you (two) eat the fish?'
(21)' \# M óe e=ang ná?
fish 2PL=eat Y/N
'Did you (two) eat the fish?'
(Good for: ‘Did you (all) eat the fish?')
This exception to obligatory procliticisation occurs when the clause is monovalent, there is usually no adjunct nominal (if there is, the adjunct nominal must be one that at least optionally follows an agreement clitic - see chapter 14), especially if the subject is first person dual
inclusive. Some examples of first person dual subject, with the normal nonsingular (glossed as PL ) agreement proclitics, can be seen in the following sentences.

Amanè ne=ta \(n\)-ùng.
1DU.IN 1PL=sitting 1PL-sit
'You and I (both) sat down.'
(23) Enake \(e=\) ta hùng.

2DU 2PL=sitting 2PL-sit
'You both sat down.'
(24) Tenape te=ta y-ùng.

3DU.F 3PL=sitting 3PL-sit
'Those two women both sat down.'
If the subject of the sentence was simply plural, such as 'We (all) sat.', we would predict, and find, the following two alternative means of expressing the concept (analogous sentences apply for the second and third persons).
(25)
a. Ne ne=ta n-ùng.
\(1 \mathrm{PL} \quad 1 \mathrm{PL}=\) sitting 1PL-sit
'We (all) sat.'
b. Ne=ta \(n\)-ùng.
\(1 \mathrm{PL}=\) sitting 1PL-sit
'We (all) sat.'
In addition to these alternatives, we would correctly predict that the clause with a free pronoun, but not clitic pronoun, would be ungrammatical, as in (26).
\[
\begin{align*}
& \text { * ne ta n-ùng. }  \tag{26}\\
& \text { 1PL sitting, 1PL-sit } \\
& \text { 'We (all) sat.' }
\end{align*}
\]

The lack of a dual distinction in the clitic pronouns makes the sentence in (25)b unlikely as an alternative structure for the sentence Amane ne=ta \(n\)-ung, and it is in fact dispreferred, for the reasons of contentful information loss given above. There is, however, an alternative, in which the free pronoun appears, and the clitic does not:
(27) Amanè ta n-ùng.

1DU.IN sitting 1PL-sit
'You and I (both) sat.'
(28) Enake ta hùng.

2DU sitting 2PL-sit
'You both sat.'
(29) Tenape ta y-ùng.

3DU.F sitting 3PL-sit
'Those two women both sat down.'
At first sight these data appears to contradict the statement that clitic pronouns are obligatory with all and any verbal predicates. These are, indeed, situations in which the verbs appears without the clitic pronouns. There are, however, reasons to believe that it is a purely phonological process that creates (26), and not a morphological one. These reasons are:
1. Clitic omission is only found with monovalent verbs; a bivalent sentence always requires the use of the bound pronoun:
(30) Amanè móe ne=n-ang. 1DU.IN fish 1PL=1PL-eat
'We (both) ate some fish.'
(30)' * amane móe nang

This suggests that immediate adjacency must hold between the free pronoun and the clitic in order for the clitic to be omitted.
2. Clitic omission is only found with amanè 1 DU.IN as subject; a sentence with any other dual pronoun (including the other 1DU forms: anake 1DU.EX, anape 1 DU.EX.F) requires the pronoun:

Anake ne=ta n-ùng.
1DU 1 PL=sitting 1PL-sit
'We both sat.'
* anake ta nùng

The same phenomenon of clitic omission is also found with the feminine pronouns, illustrated here, and the non-first persons (not illustrated here).

> Anape ne=ta n-ùng.
> 1DU.F 1PL=sitting 1PL-sit
> 'We (women) both sat.'
> * anape ta nùng

This suggests that clitic omission can only occur when the two adjacent syllables are identical: amane ne=ta nung, and is blocked from occurring in any other environments. A similar, and similarly optional, process is found in other instances of two identical morphemes coming together when not reduplicate: 'close', for instance, Ialapalíli, is optionally realised as lalapáli, with the sequence of two identical syllables reduced to one.
It seems that this apparent exception to the presence of clitics on verbs in fact confirms their obligatoriness: the only circumstances in which the clitic may be dropped are when a more semantically specified pronoun, with an identical last syllable to the clitic, immediately precedes it; in this case, a purely phonological reduction of two otherwise identical adjacent syllables, attested as a phonological rule elsewhere in the language, occurs.

The next instance in which a verbal clause may appear without any proclitic agreement is when the subject is both inanimate and there is not a strong degree of affect implied by the verb. Compare, for instance, the lack of agreement in (35), which has a low-affect (monovalent) verb, with the obligatory agreement in (36), in which there is a strong (from the speaker's perspective) level of affect associated with the predicate.
\[
\begin{array}{lll}
\begin{array}{l}
\text { Fu } \\
\text { rain } \\
\text { 'It's }
\end{array} & \text { main. } & \text { rain.falls }  \tag{35}\\
\text { (nì). } & \text { 1sG } \\
\text { (on } & \text { me).' }
\end{array}
\]
\[
\begin{align*}
& \text { Fu nì } \quad \text { (ke=)ká. }  \tag{36}\\
& \text { rain 1SG 3SG.NF=hit } \\
& \text { 'The rain's soaking me.' }
\end{align*}
\]

Clearly the nature of the subject is not a contributing factor to the obligatoriness or otherwise of the proclitic agreement. In (35) the affected participant (the object) is postverbal, whereas in (36) it is preverbal. This does form a strong correlation with the lack of proclitic agreement with this predicate; other examples of sentences lacking proclitics on their verbs can be seen in (37) (38). In all cases there is no preverbal object, and an inanimate causee. In (38) we can see that the addition of a proclitic renders the bivalent clause ungrammatical.
\[
\begin{align*}
& \text { Kong ku nì. }  \tag{37}\\
& \text { thorn stab 1SG } \\
& \text { 'I got poked on a thorn.' }
\end{align*}
\]
(38) * kong ke ku nì

Example (39) shows a monovalent clause without proclitic agreement on the verb hóe; it also, by default and following from the discussion and predictions arising from examining (35) - (38), lacks a preverbal object, which is not grammatical with proclitic agreement. (40) is a similar example with a single-verb predicate (discounting the aspect-marking auxiliaries).
(39) Rángkue tí nì=hí=pa, ó bápáli hóe toe, ... time sea \(1 \mathrm{SG}=\) wash=INSTR wave big, landwards 3.come 'When I was washing in the sea, a big wave came...'
(40) * ó bápáli pe hóe toe
(41) Ó bápáli e i li. wave big ascend be do
'A big wave is coming (up).'
(42) * ó bápáli pe ei li

In this last example, (42), not only is there no proclitic on the verb, but also that the main verb and the auxiliaries do not show any agreement marking at all. Compare this to the use of toe in (39), the third person form, rather than loe. In (41) the auxiliary verb forms i li could be considered the non-femiine third person singular inflection, but if we were marking this pronominal category e 'ascend' should be prefixed: ke. There is clearly an asymmetry between prefixal agreement (at least the more easily segmentable prefixal agreement seen in e: ke '( He ) ascends.' and proclitic agreement on the one hand, and stem-suppletive, irregular, or vowelalternation types of agreement.See 7.8 for further discussion of these asymmetries, as well as references to where such discussion is found elsewhere in this book.

A final instance in which proclitic agreement is not found involves lexicalisations and definitions in which verbs are part of what functions as a nominal compound, but is structurally a syntactic phrase. Occasionally statements about 'the way things are' also appear without any proclitic agreement marking. For instance, in the following definition of húhú 'inheritance', the second clause has no proclitic; the 'expected' position of the 3SG.NF clitic \(\mathrm{ke}=\) is shown with empty brackets, [ ].


Other examples of lexicalised collocations, or predicates involving defining characteristics, in which the verb appears without proclitics include the following (again, the 'expected' position of the subject clitic is shown in square brackets). The following were offered as definitions of some words or as defining characteristics of a person.
\begin{tabular}{llllll} 
keng, & te=bà & yá-mo & [ ] ti & e & ti \\
shaman & 3PL=person & medicine-potion & 3pL.do & 3PL.be & 3PL.do \\
'Shaman, a person who uses potions (Malay dukun)' & &
\end{tabular} 'Shaman, a person who uses potions (Malay dukun)'
\(\begin{array}{lllll}\text { táng=ing, } & \text { te=ueme } & {\left[\begin{array}{ll}\text { ti } & \mathrm{e} \\ \text { k.o.net=DEIC } & \text { 3PL=woman }\end{array} \begin{array}{ll}\text { 3PL.do } & \text { 3PL.be }\end{array}\right.} & \text { 3PL.do }\end{array}\)
'the tang nets, the women make them'
pumà []òe i li fítong wallaby jump be do ground 'Wallabies jump (about) on the ground'
\begin{tabular}{llll} 
Ke=k-a tà & ana=ra & naké & [ ] k-atà \\
3SG.NF=3SG.NF-walk running & like=also & dog & 3SG.NF-walk running \\
i li & & & \\
be do & & \\
'He runs like a dog runs.' & &
\end{tabular}

Compare this last sentence with the following, in which the use of a proclitic ensures a specific subject, rather than the generic one that is the normal interpretation for the sentence without proclitics.
(48) Pumà ke=òe i li fítong.
wallaby 3SG.NF=jump be do ground
'(The) wallaby is jumping (about) on the ground'
This omission of proclitic agreement is not the rule for all lexicalisations; compare the lack of proclitics in the above example with their presence in the following lexicalised collocation.
```

te=t-ang fé-tè
3PL=3PL-eat spoon-3PL.GEN
'eating spoon'

```

An example of the omission of proclitics in a non-lexicalised statement of 'the way things are', with complete habitual aspectual interpretation, is the following, taken from the last line of text 17 in appendix 4 . The speaker is describing how widows make do after their husbands have died, and how their children become frequent visitors, taking care of everyday needs. Importantly, this is a habitual event, not a single occurrence.
\[
\begin{align*}
& \text { ung a=we ke=bà angku } \quad\left[\begin{array}{l}
\text { toe= ing } \\
\text { now=this } \\
\text { 3SG.NF=person child } \\
\text { ara nì ya } \quad \text { ye=loe }
\end{array} \quad\right. \text { léng. }  \tag{50}\\
& \text { like 1SG thing } \\
& \text { lisG.NF=get.PL give } \\
& \text { 'now the children come, and I, he gives things (to me).' }
\end{align*}
\]

Further discussion on other aspects of the status of verbal agreement can be found in 7.9, where the asymmetry between first and second person agreement on the one hand, and third person agreement on the other, is discussed and analysed.

\subsection*{7.2.2 Prefixal agreement}

Prefixing is the most common means employed to mark subject on the verb, after the obligatory proclitic marking described in the previous section. Although we can posit a consistent set of subject prefixes at an abstract level, these prefixes interact with the initial consonant of the verb (if there is an onset) to yield somewhat opaque allomorphs. Only when we are dealing with a vowel-initial verb are the posited abstract prefixes completely obvious. Further, the esoterogenic nature of Skou society has resulted in many near-identical verbs being coined on the basis of previously semantically underspecified light verbs, with the differences residing solely in their conjugation.

Prefixal agreement is found with approximately two-thirds of all verb roots, unlike proclitic agreement, which appears with all verbs. Partly this restriction is phonologically based: only verbs stems that begin with a vowel or \(\mathrm{w}, \mathrm{k}, \mathrm{h}, \mathrm{I}\) (and perhaps r ; this is only attested in only one verb, re 'go') show prefixal inflection. That said, not all verbs with these onsets show prefixation, so the specification of a verb as taking or not taking prefixes must be lexical, and thus stipulative. Examples of verbs showing the forms of the major regular inflectional patterns are given in table 100xx; additional examples of the inflectional patterns of different verbs can be found in appendix 2 .

Table 100. Examples of prefixal inflectional paradigms
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & vocalic & bilabial & alveolar-l & alveolar-r & velar & glottal \\
\hline 1SG & e & wé & Iú & re & ké & ha \\
\hline 2SG & me & pé & pú & me & bé & ma \\
\hline 3SG.NF & ke & wé & Iú & ti & ké & ka \\
\hline 3SG.F & pe & wé & rú & te & wé & wa \\
\hline 1PL & ne & wé & rú & ne & ké & na \\
\hline 2 PL & e & wé & Iú & re & ké & ha \\
\hline \multirow[t]{2}{*}{3PL} & te & wé & rú & te & ké & ya \\
\hline & 'go east' & 'get.F' & 'release' & 'go' & 'get' & 'walk' \\
\hline
\end{tabular}

While there is considerable irregularity in the initial consonant patterns seen in table xx100, we can discern a common pattern of 'underlying' consonantal prefixation based around six prefixes that attach to and merge with any onset that the verb root might supply. (This analysis was first proposed for Dumo by Ross in 1980. It applies just as well to Skou, eliciting the same underlying regularities that Voorhoeve (1971) suggested might be the case.) These prefixes occur in the following pattern:

Table 101. Inferred underlying prefixes
\begin{tabular}{lll}
\hline \hline & SG & PL \\
\hline 1 & Ø-, k-, n- & n- \\
2 & \(m-\) & \(\varnothing-\) \\
\(3 . N F\) & \(k-\) & \(t-, y-\) \\
\(3 . F\) & \(p-\) & \\
\hline \hline
\end{tabular}

As mentioned above, all of the putative underlying prefixes shown in this table demonstrate a range of allomorphs based on the phonological environment they appear in, specifically based on their interaction with a verb stem-initial consonant. In combination with consonant-initial verbs, a considerable number of cluster simplifications are found, shown in table xx102. This arranges the verbs according to the onset that they display for the 2PL form, which appears to be the root form of the verb. While there are five different columns, they are not represented equally in the lexicon (see appendix 3.3 for more detailed information on the membership of different verbs to the different subclasses of the conjugations).

Table 102. Underlying prefixes and phonological conjugations


There may be (underlying, historical) variation in the 1 SG prefix for the alveolar and velar paradigms as well, but this is not recoverable from the synchronic evidence. Regular sound changes show the reduction of initial clusters [voiceless stop + lateral] in favour of the lateral alone. Of particular relevance to the analysis of the alveolar paradigm, we have attested instances of \({ }^{2} \mathrm{ll}>\mathrm{l}\), which would operate to obscure any difference between an original \(*_{\mathrm{k}}\) - 1 for 1 SG and a historical \(* \emptyset-1\), both of which would be predicted to show simple I reflexes in contemporary Skou. Most of the other cluster reductions in the verbal paradigms are also compatible with regular historical changes.

Examining table 102 xxx we can see that the \(W\)-initial verbs show a very reduced paradigm, with only 2 SG differentiated. The forms for 2 SG, 3 SG.NF, 3 SG.F, 1 PL and 2 PL in the different paradigms above are relatively uncomplicated. The lack of a prefix on 2 PL means that querying the verbs in the 2PL form is the simplest means of eliciting the root form, though speaker preference lists words in the dictionary, and here in the wordlist, under their 1SG forms. The 3PL has two allomorphs, which do not follow any strict phonological conditioning, and simply reflect a conjugation split in proto-Skou (The same allomorphy for the 3PL inflection can also be observed in the other closely related Skou languages, Nyao, Wutung, Dumo, Dusur and Leitre). There is a tendency for the less frequent y - allomorph to occur with h -initial stems, and for the t- allomorph to appear elsewhere (and exclusively with vowel-initial stems), but \(t\) - is also found with h -stems. The following l-initial stems, làng 'chop' and lá 'roast' show that representatives of either allomorph may occur. In combination with the initial alveolar lateral of the stem in the second example, lá 'roast', the (putative underlying) combination t-l surfaces as [r], reflecting a synchronic continuation of the diachronic *tl > r change that has applied in Skou (Donohue 2002).
\(y\)-allomorph
(51)

Te rí te=y-àng.
3PL tree 3PL=3PL-chop
'They're chopping the wood.'
t -allomorph
(52) Te móe te=r-á.

3PL fish 3PL=3PL-roast
'They're roasting the fish.'
With two different h-initial verb stems, há 'laugh' and há 'stand', we find an otherwise homophonous pair of verbs differentiated only in their third person plural form, where the different conjugations allow for different inflections.

> y-allomorph
\begin{tabular}{lll} 
Te=a & te & te=y=á. \\
3PL=PROM 3PL & 3PL=3PL-laugh \\
'They're laughing.'
\end{tabular}
t -allomorph
\begin{tabular}{lll} 
Te=a & te & te=t=á. \\
3PL=PROM 3PL & 3PL=3PL-stand
\end{tabular}

The other major area of variation that we can see in these inflectional paradigms involves the 1SG cell of the paradigm. Synchronically there are three allomorphs for 1SG: \(\emptyset\) - (the majority case), \(k\) - and \(n\). The consonantal allomorphs reflect pre-proto-Skou \(*_{I}\), which has been lost in most daughter languages (see Donohue 2002b). In Skou *! \(\mathrm{T}_{\mathrm{I}}\) has been lost (> \(\varnothing\) ) in nominals, but is (barely) retained, irregularly, in the verbal paradigm. In verbal inflection for 1SG the original \({ }_{T \eta T}\) is either lost (the majority case), is realised as an alveolar nasal ( \(*_{\eta}>n\) ), preserving the feature [+nasal] but losing the back place features, or else is preserved without nasality but retaining the velar place ( \({ }^{*} \mathrm{~T}_{\mathrm{y}}>\mathrm{k}\) ). \({ }^{42}\) Exemplars of this variation can be seen in the following three verbs, which show the three allomorphs of the first person singular inflection:
\[
\begin{equation*}
\emptyset \text {-allomorph } \tag{55}
\end{equation*}
\]

1SG=go seawards
'I went towards the sea.'
\(k\)-allomorph
(56)
\(\begin{array}{ll}\begin{array}{ll}\text { Rámángku } \\ \text { rice } & n i ̀=k-a n g . ~\end{array} \\ \text { 'I ate rice, } & 1 S G=1 \text { SG-eat }\end{array}\)
'I ate rice.'
(rámángku is a lexicalised compound composed of the roots rámang 'ant (sp.)' and ku 'child, egg', now conventionalised as the word for 'rice', by analogy with the appearance of cooked rice: 'ant's eggs')

\footnotetext{
42 Nyao, the neighbouring relative to the south-east (see 1.4 and 7.8.1.3), also shows a \(k\) - in the 1 SG form of the verb 'eat', suggesting that this variation in inflection for the 1SG part of the paradigm reflects an irregularity in the proto-Skou paradigm, and not simply an idiosyncrasy of Skou morphology. See figure 1 in section 1.4 for an idea of the 'genetic distance' between Nyao and its western neighbour, Skou.
}
\(n\)-allomorph
\[
\begin{array}{ll}
\text { Pe ong } & \text { nì=n-e. }  \tag{57}\\
\text { 3SG.F memory } & \text { 1SG=1SG-forget } \\
\text { 'I forgot her.' } &
\end{array}
\]

In some verbs we find alternation between the \(k\)-allomorph and the \(\emptyset\)-allomorph. This can be seen in verbs such as a 'carry', which can appear (with roughly equal frequency) as either a or ka in the 1SG form, showing inflection according to either the \(\emptyset\)-paradigm or the kparadigm. The verb 'drink', the root of which is hung, is usually inflected as kung in the 1SG, showing a \(k\) - inflection on the root, but some younger speakers have the form hung, showing \(\emptyset\)-inflection. This newer innovation is thought by the older speakers as having arisen from contact with speakers of related languages across the border in Papua New Guinea, which inflect this verb (and others) without a consonant for 1SG: Waromo, Lido /hiī/ 'I drink'.

One possible alternative arrangement for the occurring initial consonants of verbs would show the correspondence consonant:agreement function, revealing which functions an initial consonant (or its absence) is used for. This is shown in table 103 xx - this table only lists the verbs that do inflect by consonant prefixation, and does not include the verbs which are uninflecting, and so obviously show the same initial consonant with reference to all pronominal inflections (see 'wash' in 7.2.2.2, and the verbs in table 102). Appendix 2 lists further verbal paradigms, both the regular and the irregular. From this table we can see that for most initial consonants there is more than one possible referent. Only the palatal consonants \(j\) and \(y\) uniquely refer to one pronominal argument (3PL), though most of the other consonantsthere do show clear preferences in their coding choices. The rightmost column of this table lists the total number of agreement cells that are marked by the consonant in the leftmost cell, combining the information for the four major inflectional conjugations.

Table 103. Initial consonants and agreement features
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & \(\emptyset\) & W & L & K & H & No. \\
\hline p & 3SG.F & 2SG & 2SG & & & 3 \\
\hline t & 3PL & & 3SG.F, 1PL, 3PL & & 3PL & 5 \\
\hline k & \[
\begin{aligned}
& \hline \text { 1SG, } \\
& \text { 3SG.NF }
\end{aligned}
\] & & & \[
\begin{aligned}
& \text { 1SG, 1 PL, } \\
& \text { 2PL, 3PL }
\end{aligned}
\] & \[
\begin{aligned}
& \text { 1SG, } \\
& \text { 3SG.NF }
\end{aligned}
\] & 8 \\
\hline b & & & & 2SG & & 1 \\
\hline j & & & & 3PL & & 1 \\
\hline m & 2SG & & & & 2SG & 2 \\
\hline n & 1SG, 1 PL & & & & 1PL & 3 \\
\hline h & & & & & 1SG, 2PL & 2 \\
\hline w & & 1SG, 3SG.NF, 3SG.F, 1 PL, 2PL, 3PL & 3SG.F & 3SG.F & 3SG.F & 9 \\
\hline \(r\) & & & 3SG.F, 1 PL, 3PL & & & 3 \\
\hline | & & & \[
\begin{aligned}
& \text { 1SG, 3SG.NF, } \\
& \text { 2PL }
\end{aligned}
\] & & & 3 \\
\hline y & & & & & 3PL & 1 \\
\hline & 7 & 7 & 11 & 7 & 9 & \\
\hline
\end{tabular}

Yet another possible arrangement of this data, also useful for determining the functioning of the agreement system in Skou, is to arrange the consonants that are used to encode each of the person/number/gender combinations. This is shown in table 104xx.

Table 104. Pronominal features and consonant encoding
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline & \(\emptyset\) & W & L & K & H & Sum of onsets & Number? \\
\hline 1SG & kn Ø & w & | & k & k h & knhwl \(\quad\) ¢ & 6 \\
\hline 2SG & m & p & p & b & m & pbm & 3 \\
\hline 3SG.NF & k & w & I & k & k & kwl & 3 \\
\hline 3SG.F & p & w & w tr & w & w & ptwr & 4 \\
\hline 1PL & n & w & tr & k & n & tknwr & 5 \\
\hline 2PL & \(\emptyset\) & w & | & k & h & k h w I Ø & 5 \\
\hline 3PL & t & w & \(r\) & k & t & tkw r & 4 \\
\hline
\end{tabular}

It is immediately apparent from this table that the first person singular shows the greatest amount of variation, though that is in part due to the irregular appearance of \(k\) and \(n\) as an agreement marker on a small number of verbs ( \(k\) - on \(k\)-ang 'eat' and \(k\)-ung 'drink', and optionally with ( \(k\)-)a 'carry', \(n\) - only on \(n\)-e 'refuse'). In no case is there a one-to-one correspondence between inflectional features and the shape of the verbal prefix; the only area which comes close to this is with the inflection for 2 SG, which is the only inflection that uses the voiced bilabial stops b and m , and is the most frequent feature bundle to be expounded by p . The n that marks 1 PL and in one case 1 SG is also relatively unique, since it always identifies first person, and in almost all cases non-singular first person. This can be compared to the opposite extreme, the consonant W , which is found in all cells of the inflectional paradigm except those expounding 2 SG, and so must be thought of as the least explicit consonant to find at the onset of a prefixally inflecting verb.

One final note on the comparison of the relative 'weight' of ambiguity carried by the different possible verb onsets: there are many verbs that show defective prefixal agreement, described in 7.2.2.1, or no agreement at all, described in 7.2.2.2. In most cases this is a result of the verb starting with a consonant that does not allow for variation in the paradigm, but also includes verbs that must simply be annotated as not showing the expected variation, or showing it to a lesser extent than is predicted.

\subsection*{7.2.2.1 Defective prefixal agreement}

In the previous section we saw a model for the most common, and most regular (in terms of recurring and phonetically and/or diachronically explicable patterns) forms of the agreement paradigm that are found with prefix-taking verbs when they are inflected for subject. In addition to these regular patterns, taking into account the conjugation variation that is present in the alveolar, velar and glottal members of that set (the difference between verbs that take a tconjugation or a y-conjugation in the 3PL, or the various, essentially unpredictable, allomorphs of the 3SG.F found in the alveolar verbs), various other verbs show defective paradigms, or alternatives. These 'partial paradigms' will be described here. They are termed 'defective' paradigms because, in all cases, they are not so much alternatives to the major inflectional conjugations, but rather subsets of the information that is present in those paradigms; in other words, they represent various incomplete applications of the regular inflectional rules.

The most common pattern of irregularity involves just one or two cells of inflection being at variance from the expected pattern, as seen in the verbs in table 105 xx , with the unexpected inflection, or lack of inflection, shown in shaded cells. For instance, in the verb 'stand', the 3SG.NF does show inflection, but only by means of vowel alternations (see 7.2.3), and not through the expected use of the consonantal prefix \(k\) - on the stem, as described in 7.2.2. Given that inflection by means of prefix is attested in this verb for the 2 SG and the 1 PL , the absence of prefixal inflection in the 3 SG.NF, 3 SG.F and 3PL cells is inexplicable. The only cells that do not show 'defective' agreement patterns are those that are typically expounded by \(\emptyset\)-prefixation: the 1SG and 1PL cells never show irregular additional prefixation, and since they typically show none, it cannot be omitted. The verbs below show that all other cells can be defective, though there is a clear preference for any defective inflectional cells to centre on the third persons (of course, the presence of a 'defective' inflection for a 1SG or 2PL subject would not be detectable, since verbs with those subjects typically display an uninflected form of the verb root).

Table 105. Defective inflection paradigms
\begin{tabular}{|c|c|c|c|c|}
\hline & vocalic & velar & glottal & glottal \\
\hline 1SG & i & wung & hi & hue \\
\hline 2SG & me & wung & mi & mue \\
\hline 3SG.NF & i & wung & ki & kue \\
\hline 3SG.F & e & pung & wi & wue \\
\hline 1PL & ne & wung & ni & bue \\
\hline 2PL & e & wung & hi & hue \\
\hline 3PL & e & bung & hi & yue \\
\hline & 'stand' & 'die' & 'go west' & 'tread on' \\
\hline
\end{tabular}

One verb has been recorded in two different inflectional paradigms, one more 'regular', and accepted by all speakers, and the other highly irregular, and only heard from some older speakers. The 'regular' paradigm for oeng 'remember' does not conform to the norms seen in the previous section, in that many of the expected inflections are missing (the prefixes for 3SG.F, 1PL and 3PL; we might expect *pong, *noeng and *teng for these forms, but the prefixes are missing). We can only call this the 'regular' paradigm by comparison with the alternative 'irregular' paradigm, which has been heard from, and is accepted by, only by some older speakers (who also, in the main, accept the 'regular' paradigm as well). The irregular paradigm deviates from our expectations for a 'normal' inflecting verb in lacking the prefixes for the plural numbers, and also 3 SG.NF, but most strikingly in allowing an unexplained consonant cluster for the 3SG.F inflection.

Table 106. Defective inflection in the verb 'remember'
\begin{tabular}{llll}
\hline \hline 'remember' & regular & irregular \\
\hline 1SG & oeng & oeng \\
2SG & moeng & moeng \\
3SG.NF & koeng & oeng \\
3SG.F & ong & plong \\
1PL & oeng & oeng \\
2PL & oeng & oeng \\
3PL & eng & eng \\
\hline \hline
\end{tabular}

Further examples of verbs with defective inflection paradigms can be found amongst the sample verb paradigms listed in appendix 4. In addition to these verbs that show defective or irregular agreement patterns, there is also a large (approximately one third of all verb roots) group that show no variation in their onset at all for agreement. For some verbs this can be ascribed to phonological constraints (the verb root does not begin with a consonant from the regular phonological classes, \(\varnothing \mathrm{wl}(\mathrm{r}) \mathrm{k}\) or h . For other verbs the right phonological conditions are met, but the verb stipulatively lacks any alternations that might be ascribed to underlying prefixation. These are, in a sense, \(100 \%\) irregular verbs, in that they satisfy all the phonological conditions for prefixal inflection but, just as with the verbs discussed in this section, stipulatively lack some prefixal inflectional categories. While the verbs escribed here show at least some regular inflection, the verbs described in the following section show a complete lack of prefixal agreement.

\subsection*{7.2.2.2 The lack of prefixal agreement in some verbs}

We have seen that the paradigms for prefixal agreement on verbs of different phonological types are complicated, but underlyingly regular (the beginning of 7.2.2). It is also true that many verbs lack any prefixal agreement. While a lot of this can be described phonologically, there is also a large element of lexical stipulativeness involved.

We can summarise the information presented on verbal inflection so far in this chapter as follows:
- there are regular conjugations for the verbs beginning with \(\mathrm{w}, \mathrm{I}, \mathrm{k}, \mathrm{h}\) or with a vowel (a, oe, ue, o, and e are attested in this position; the high non-central vowels \(i\) and \(u\) are not found in conjugating verbs);
- for the first person singular and the third person plural there are alternate inflectional forms within these conjugations (though all vocalic paradigm verbs have t- in 3PL, and all bilabial verbs show the same inflection for these cells);
- there is extra variation in the l-conjugation verbs for 3SG.F and 1PL.

In the light of these conditions, compare the three verbs in table 107xxx, all h-initial and so phonologically analogous, yet displaying degrees of variation that exceeds that described above.

Table 107. Differences in prefixal agreement patterns on \(h\)-initial verbs
\begin{tabular}{lccc}
\hline \hline & 'stand' & 'close' & 'wash' \\
\hline 1SG & há & há & hí \\
2SG & má & má & hí \\
3SG.NF & ká & ká & hí \\
3SG.F & wá & wá & hí \\
1PL & ná & ná & hí \\
2PL & há & há & hí \\
3PL & tá & yá & hí \\
\hline \hline
\end{tabular}

The different 3PL inflections of 'stand' and 'close' can be accounted for for assuming that they are \(h\)-initial verbs with membership in the \(t\) - and \(y\)-conjugations, respectively. Both have the same the same stem, há, and are differentiated only in the 3PL. The verb 'wash' is also clearly h-initial, and unproblematically has the root form hí. In contradistinction to the other two verbs in the table, however, there is no variation of the stem for person, number and gender of
the subject at all. The lack of prefixal inflection on this verb is unexplained by any phonological factors: in addition to hí for 1 SG and 2PL we would expect to find mí, kí, wí, ní and either tí or yí, and this is not the case. The vowel is not a conditioning factor, as can be seen in the inflections of the verb há hi 'count': há hi, má mi, ká ki, etc. to yá yi (see 7.8 for discussion of this verb and others with 'bipartite' inflection); we must simply accept that hí is listed in the lexicon as a verb that does not take inflection, without any phonological or semantic conditioning factors.

Other examples of verbs with different onsets that do not show alternations are shown in the following table. Only one example for each onset type (each type of consonant is shown; only one example of a vocalic (= non-consonantal) onset is shown) is shown; additional examples can be found in appendix 4 . In this table note particularly the vowel-initial verbs, and those beginning with \(h, k\), \(I\), and \(w\), all of which are onsets that are attested templates for prefixing verbs, as already seen in 8.2.2. The fact that verbs with these onsets are also found without prefixation is thus proof that the assignment of an agreement strategy is based on lexical stipulation, and not on phonological grounds.

Table 108. Some sample non-prefixing verbs


We can see that all of the consonantal onsets of Skou (b, f, h, j, k, I, m, n, p, r, t, w, y) are found as the initial element in verbs. There are also a number of verbs that show no prefixal alternation, as with the verbs above, but do show some agreement by means of vowel alternations. These are described in 7.2 .3 . It should be noted, though, before we leave this section, that the rate of verbs that are phonologically suitable for prefixal agreement marking (that is, verbs that have as their onset \(\mathrm{w}, \mathrm{I}, \mathrm{k}, \mathrm{h}\) or \(\varnothing\) ) and which do not take prefixal agreement are in a very small minority. In the overwhelming majority of cases verbs that can take prefixal agreement do: the overall frequency of prefixal agreement patterns in verbs in \(66.7 \%\), but if we examine only those verbs that are phonologically eligible to appear with a prefix, then the figure
rises to \(90 \% .^{43}\) The patterns reported here are thus minority patterns within the otherwise phonologically regular system (allowing for the variation described in the main part of 7.2.2; and see also appendix 2).

\subsection*{7.2.2.3 Irregular prefixal agreement}

In addition to the patterns of regular agreement, there are some instances in which the 'wrong' forms appears. Some of the ways in which irregularities are found will be discussed here.

We have already seen the irregularities of omission in 7.2.2.1 and 7.2.2.2, but from table 102 xxx and the surrounding discussion it should be obvious that there are many areas in which verbs can potentially show 'irregular' variation. The choice of \(\emptyset, \mathrm{k}\) - or n - to mark 1 SG for vowel- and glottal-initial verbs is one example of an element of the inflectional system that needs to be lexically specified, as is the choice of \(y\) - or t- conjugation for 3PL. Additionally, and especially in the alveolar paradigm, there is quite a lot of individuality in the exact realisations of each inflectional cell; 3SG. F, for instance, may be realised as any of \(r\), \(t\), \(w\) or \(p\). Logically there could be up to 120 variations on the alveolar paradigm, given the combinations found in table 102 xxx ; in fact, as can be judged from appendix 1 , there are only 11 attested variations, implying that there must be some organising principles behind the choice of exponent in each cell. This is a point that we shall return to in 7.2.2.4.

The choice of which of the varying cells are selected for a given verb does have some implication for which other variables can be chosen. The empirical data can be seen in appendix 2 , and in 7.2 .2 .5 . Additionally, we find some variation in the realisation of each verb. The verb leng 'give', for instance, normally inflects with the paradigm seen in (58).
Regular inflection of 'give'
leng
reng
peng
leng
leng
ring
rung

These are the citation forms for the verb in its paradigm, as will be given by any number of speakers without hesitation. Furthermore, they are the most common forms encountered when the verb is used in non-monitored speech. Nonetheless, various unpredicted inflections have been occasionally heard. The 3PL form has been attested with an \(n\) - instead of an \(r\)-, the 1PL with \(t-\), and the 3 SG. NF as nung rather than the unmarked leng. The following examples are from the texts TeTáng, line (25), and Tangmoe, line (30). In the first line below we can see 'get' appearing without vowel alternations (te=r-e for expected te=r-i), and the verb 'give' appearing as \(n\)-ing rather than (prescriptive) ring, from the root léng.
\begin{tabular}{|c|c|c|c|c|}
\hline ó=fa & te=r-e & n-ing & e & ti-ti=ing a, \\
\hline little.bit=only & 3PL=3PL-get & 3PL-give & 3PL.be & 3PL.do-RED=the \\
\hline ell they j & ive us some, & would & & \\
\hline
\end{tabular}

43 The distribution of the non-prefixing verbs is not even across the different onsets: \({ }^{1 / 7}\) bilabial verbs, \({ }^{1 / 50}\) alveolar verbs, \({ }^{1} / 9\) velar verbs, \({ }^{1 / 9}\) glottal verbs, thus averaging \(10 \%\) or less for the consonant-initial paradigms, but \(5 / 14\) or \(36 \%\) of all vocalic verb roots, implying that the vowelinitial verbs are less regular than the others.
(60) á ne=r-óe t-éng=pa te=r-í hí, rope 1 PL=1PL-get.PL 1 PL-give=INSTR \(\mathbf{3 P L = 3 P L}\)-get.PL go.down 'they catch the fish with lines, and get them, ...'

In the next extract the verb 'give' appears with a 3SG.NF subject, an environment in which it is normally is realised as rung; in this extract, however, nung is found, with an unexpected nasal onset. (It is clear that the nasal appearsas a result of the influence of the nasalised vowel; the fact that \(r\) patterns as the missing *d, even though historically is is derived from *s, might indicate that some sort of nasal harmony within the syllable is operating in Skou as well as other languages of the Skou family (see the discussion of *b[ǐ/
\[
\begin{array}{ccc}
\text {... taíngbe ung } \quad \text { ke=we } \quad \text { núng } & \text { nì. }  \tag{61}\\
\text { money now } & \text { 3SG.NF=get.F give } & \text { 1SG } \\
\text { 'now he's given me some money.' }
\end{array}
\]

In both these cases the narrators, when questioned, made self-corrections to the prescribed form. Nonetheless this level of deviation from the prescriptive norms is not unusual, and indicates that there are less rule-based regularities underlying the inflectional system of the verbs than might be thought.

\subsection*{7.2.2.4 Inheritance trees and the regularities behind Skou prefixation}

We have seen that, despite underlying regularities, the number and form of inflectional contrasts on verbs in Skou is subject to a large amount of idiosyncrasy. Even though there is a strong element of irregularity in these verbal paradigms, the way in which different verbs build up contrasts in their inflectional paradigm is not random. Table 109xx shows the progressive development of differences in the prefixing paradigms of various verbs. We can see that, rather than being random, there are common points at which inflectional differences appear, and all verbs share the features of having no inflection for 2PL. There are some developments beyond those shown here (see appendix 2), but they are minority cases.

Table 109. The development of number of prefixal contrasts in inflecting verbs
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & 2SG & 3SG.F & 3PL & 1PL & 3SG.NF & 1SG & 2PL & \\
\hline \multirow[t]{5}{*}{Nonbranching \(1^{\text {st }}\) branch \(2^{\text {nd }}\) branch \(3^{\text {rd }}\) branch} & wá & wá & wá & wá & wá & wá & wá & 'plant' \\
\hline & \multirow[t]{4}{*}{\begin{tabular}{l}
pé \\
pá \\
bá \\
páng
\end{tabular}} & wé & \multirow[t]{2}{*}{\begin{tabular}{l}
wé \\
lá
\end{tabular}} & wé & wé & wé & wé & 'get.F' \\
\hline & & wá & & lá & lá & lá & lá & 'utter' \\
\hline & & wá & já & ká & ká & ká & ká & 'hit' \\
\hline & & wáng & táng & táng & láng & láng & láng & 'hit.F' \\
\hline \(4^{\text {th }}\) branch & páng & wáng & jáng & táng & láng & láng & láng & 'narrate' \\
\hline \(5^{\text {th }}\) branch & ma & wa & ta & na & ka & ha & ha & 'walk' \\
\hline \(6^{\text {th }}\) branch & mang & kang & tang & nang & kang & kang & ang & 'eat' \\
\hline oeng ... & me & pe & te & ne \(\rightarrow\) & ke & \(\leftarrow\) ne & e & 'refuse' \\
\hline
\end{tabular}

From the data given in this section we can create an inheritance tree for grammatical features that are parsed in the morphology (for this approach see, for example, Wunderlich and Fabri 1996). We can describe the inflectional system of Skou in terms of an increasing number of distinctions, arranged in a dependency hierarchy. From (61) we can see that, of the verbs that do show underlying prefixes (or, if we prefer, stem alternations) that correlate with features associated with the subject, the least differentiated verbs are those belonging to the bilabial
paradigm, in which only the 2 SG is distinguished from the rest. We may posit that the first split, then, in a verb's stem involves the 2 SG being distinguished from the rest. If, and only if, this distinction is made are there any further distinctions in the paradigm; there are no verbs that do show consonant alternations which do not have a distinct form for the 2 SG part of their paradigm.

The next level of distinctions then involves the 3SG.F being distinguished from the other inflections; again, from table 109xx we can see that the velar paradigm exemplifies this level in the inheritance tree. The 3 SG. NF is the next distinction to be made; the regular paradigms in table 100xx do not show this particular division, a verb in which 2SG, 3SG.F and 3SG.NF are distinguished but 1 SG and all the plurals are identical, but the data in 7.2.2.1 and appendix 2 present ample exemplification of this point amongst the irregular verbs. The complete inheritance tree that can describe all the major Skou verbal prefixation patterns is show in (62).

Inheritance tree for Skou verbal prefixation


Examining this, and extracting the sections that are relevant for an exposition of different morphological verb classes, we would first have a non-branching node, representing the verbs that do not show prefixation, such as wá in table 109xx. Somewhat uninsightfully, this is represented in (63).

Inheritance tree showing the distinctions found in bilabial verb prefixation


The next step is to describe those verbs with only a two-way distinction in prefixal alternations, and this description matches the bilabial verbs with just the first branch, as shown in (64). This diagram shows only one contrastive verb form, the form that is used to mark the 2SG. The regular bilabial verbs all fit this model, with the root form of the verb used for most inflections.

Inheritance tree showing the distinctions found in bilabial verb prefixation


The next level of detail in terms of inflectional possibilities shows a separate form for 2 SG and 3SG.F, but not for the rest. This is shown in (65); the verbs of the regular velar paradigm all fit these criteria. as do some of the less-differentiated alveolar conjugation verbs such as lá 'utter', lèng 'be quiet', la 'erect fence'.

Inheritance tree showing the distinctions found in velar verb prefixation


After this point the 3 SG.NF is the next to be differentiated, though for some verbs it might be the 3PL that is split off first. In part this is matched by the different divisions that are made in different parts of the inflectional paradigms: vowel alternation, for instance, differentiate 3SG.F and 3PL, but not 3SG.NF. Consonant alternations, on the other hand, are more likely to show differences in the 3SG.NF, while the 3PL is a more erratic category, with two conjugations, one of which (the t-conjugation) does not show any overt forms with the velar verbs. Verbs that match the first specification include ké 'get', ku 'stab', and kepu 'wear hat'. The only verb with a distinct 3PL form, but no distinct 1PL or 3SG.NF, is ká 'hit'.

After the development of a 3PL form we cannot find any clear pattern in the paradigm development of the verbs. In many alveolar-l verbs the same consonant that is used for the 3SG.F inflection is also found for both the 3PL and the 1PL, but this is not uniform. The final node on the tree in (62) is for the 2PL. This is the form of the verb stem that is used when there is no more highly specified form: it corresponds to the root form of the verb. For most (97\%) verb roots this is also the form that is used for 1SG inflection as well.

There is some evidence that the inheritance trees shown here are psychologically real, at least to some extent. Anecdotal evidence suggests that speakers do not give as much weight to the more embedded branches of the tree as they do to the higher branches, when evaluating homophone status of different verbs. For instance, when eliciting verbal paradigms I have had speakers stop part-way in and remark that the verb being checked was the same in pronunciation (bunyi sama) with one that we had recently investigated. In all cases this has turned out not to be strictly true: the paradigms are differentiated, but only in the plural forms, areas that would be low in the inheritance tree. If the uninflected 1SG and 2PL forms are identical, and the inflections for 2 SG and 3 SG.F are also the same, then it is highly likely that speakers will consider the verbs to be the same, despite being aware of the inflectional differences for the lower branches. Consider the following pair, which were judged by several informants, on several occasions, to be homophonous; the inflections have been arranged according to the inheritance tree that has been developed in this section. The paradigm is identical except for the first and third person plural forms, where 'hide (self)' shows overt inflection, while 'be quiet' is (unpredictably) uninflected. Clearly in their judgements of homophony, speakers take the 'lower' 1PL and 3PL forms to 'not count'.
\begin{tabular}{llc} 
& & Inflection of 'be quiet'
\end{tabular} Inflection of 'hide (self)'

All this suggests that the irregular inflections of verbs are at their most irregular in the lower end of the paradigm, in the inflected plural forms, and that these forms are less salient to
speakers. This is the opposite result found to that found by examining the inheritance tree that we must draw to account for inflection by means of stem suppletion or vowel alternation, presented in 7.2.3 and 7.2.4.

\subsection*{7.2.2.6 The patterns within the irregularities}

We have seen that there are different kinds of irregular verbs in Skou with different kinds of irregularities. Rather than assuming that there are no discernible patterns in this irregular set, there are, as has been demonstrated in the previous sections, clear patterns. The development of paradigmatic complexity follows a limited number of regular paths, and the existence of complexity at one point in a paradigm can be used to predict complexity elsewhere. Although not all verbs exhibit the same set of morphological alternations, there is a constant path for the development of morphological alternation, showing that there is an underlying abstract level or generality to the system.

\subsection*{7.2.3 Vowel alternation}

The features plural and feminine are marked by vowel alternations on some verbs in Skou, in addition to the proclitic and any prefixation that is present. The pattern of agreement by vowel alternation is by no means common - only approximately \(15 \%\) of the verbs so far recorded show vowel alternations, and not all of them show the full three-way split, marking both plural and feminine as distinct to the unmarked, or 'base' form. Amongst those verbs that do show the alternations described here, the general pattern is that feminine is marked by a rounding (and, usually, corresponding backing) of the vowel, and plural is marked by unrounding (and fronting). Three different vowels are found on the verb lúe 'hear' (the last word in the following sentences) in otherwise identical sentences with different subjects. The root form of the verb is shown in (67), and the following two sentences show the changes in vowel quality that accompany the marking of feminine or of plural, respectively.
(67) Ke naké boeboe ke=lá=ing ke=lúe. 3SG.NF dog bark 3SG.NF=bark=DEIC 3SG.NF=hear 'He heard the dog barking.'

Pe naké boeboe ke=lá=ing pe \(=r-u\) ú. 3SG.F dog bark 3SG.NF=bark=DEIC 3SG.F=3SG.F-hear.F 'She heard the dog barking.'

Te naké boeboe ke=lá=ing te=r-í. 3PL dog bark 3SG.NF=bark=DEIC 3PL=3PL-hear.PL 'They heard the dog barking.'
Vowel alternations are found with verbs that show agreement by other means, such as consonantal prefixation, as well as verbs that do not have any alternation by prefix. The vowel alternations are found on many verbs, but there are cases of phonologically analogous verbs not showing vowel alternations when their partner does. For instance, the most common set of alternations found between the 'unmarked' vowel of a verb (the form found with all but 3SG.F and 3PL agreement) and the plural and feminine forms are shown in table 110xx:

Table 110. Common vowel alternation patterns
\begin{tabular}{ccc}
\hline \hline Plural & Plain & Feminine \\
\hline i & i & ue \\
ing & eng & ung \\
i & ue & u \\
i & oe & ue \\
ing & oeng & ung \\
e & u & 0 \\
e & 0 & 0 \\
\hline \hline
\end{tabular}

The patterns underlying these alternations are more apparent when shown in diagrams on a pair of vowel charts, showing the changes associated with feminine and with plural. Figure xx7 shows the changes in plain vowels found when the verb is marked for feminine; in all cases the feminine vowel is rounded, and usually further back than the plain vowel.

Figure 7. Vowel alternations and the feature [ \(\pm\) feminine]


It is quite plain that the process of marking [feminine] by vowel shift involves rounding the vowel, and if the vowel was not back, additionally backing the vowel one place; if the vowel was already back, the vowel loses height. Nasalisation obeys these same principles, but when it would create an ungrammatical \(*[\dot{Z}]\), the shift moves further back to [ \(u\) ], which with nasalisation is realised as [iii], an acceptable coda.

With plural marking we see much the same set of processes, but in reverse. The vowel for a verb marked for plural is in all cases further forward, unrounded, and, if the plain form vowel was non-back, high. The plural alternation is shown in figure xx 8 .

Figure 8. Vowel alternations and the feature [ \(\pm\) plural]


Here it is plain that fronting is the central change, with the vowel additionally raising if the base vowel is [+ front], and lowering if the base vowel is [+ back]. An analysis of this rule in terms of phonological features can be found in 2.2.3.2.

Examples of verbs that show these patterns are given in the following tables. In all cases below the alternation in vowel quality shows information about the subject, as well as (in many cases) the initial consonant showing variation (see 2.2.3.2).

Table 111. Verbs showing vowel alternations for feminine and/or plural
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline Vowel: Verb: & \[
\begin{aligned}
& \text { i-i-ue } \\
& \text { 'do' } \\
& \hline
\end{aligned}
\] & ing-eng-ung 'give' & \[
\begin{aligned}
& \text { i-ue-u } \\
& \text { 'hear' }
\end{aligned}
\] & i-oe-ue 'shave' & ing-oeng-ung 'speak to' & \[
\begin{aligned}
& \text { e-u-o } \\
& \text { 'fear' }
\end{aligned}
\] \\
\hline 1SG & Ii & leng & lue & lóe & lóeng & fu \\
\hline 2SG & pi & peng & pue & póe & póeng & fu \\
\hline 3SG.NF & Ii & leng & lue & lóe & lóeng & fu \\
\hline 3SG.F & tue & nung & ru & rúe & rúng & fo \\
\hline 1PL & ti & reng & rue & róe & róeng & fu \\
\hline 2PL & Ii & leng & lue & lóe & lóeng & fu \\
\hline 3PL & ti & ning & ri & rí & ríng & fe \\
\hline ROOT: & Ii & làng & ang & Ióe & lóeng & fu \\
\hline
\end{tabular}

In addition to these (semi-)regular vowel alternations there are also verbs that show alternations but which deviate from the patterns described above.

In the simplest case the verbs change in the manner shown above. A third person singular feminine subject or a third person plural subject provide the necessary conditions for a vowel to alternate in agreement with that argument. In some verbs the situation is more complex, and vowel alternations are present showing agreement for feature alternations in either subject or object. Compare the examples above, in which person, number and gender features of the subject changes, with the paradigm below, in which the features of the subject remains constant, and the object is the variable. Again we see that the vowel in the verb changes according to feminine gender or plural number, yet the covariant is not the subject.
(70) Ke ke=naké ke=fue.

3SG.NF 3SG.NF=dog 3SG.NF=see
'He saw the male dog.'
(71) Ke pe=naké \(k e=f u\).

3SG.NF 3SG.F=dog 3SG.NF=see.F
'He saw the female dog.'
(72) Ke te=naké ke=fe. 3SG.NF 3PL=dog 3SG.NF=see.ANIM.PL
'He saw the dogs.'
In the case of agreement by vowel change for object the consonant at the beginning of the verb does not change for feminine or plural. These examples show that the vowel changes are a form of inflectional agreement that is, in some verbs at least, independent of the marking of subject by prefix and clitic. The prefixal and clitic agreement always and only varies according to values of subject; the vowel alternations, on the other hand, display changes that agree with either argument that satisfies their gender or third person plural features. The question arises, of course, how we resolve conflicting requirements for feature coding by means of vowel modification when there are two possible contenders to have their features marked by the vowel quality. To take an example, if we consider a predicate in which the subject is third person plural and the object is third person singular feminine, the values for subject will be
uncomplicatedly marked by both clitic and, of appropriate, prefix. We are faced with competing candidates for the vowel, however: if the plural subject dominates the choice of vowel alternation, then we will expect a higher front vowel allomorph. If, on the other hand, the feminine object is the determiner of vowel alternation, we will expect a more back round vowel. Both of the logical possibilities are shown in (73).

Coding quandary with vowel alternation
? Te pe te=fe.
3PL 3SG.F 3PL=see.PL
'They saw her.'

This question can be answered by examining the full paradigm of alternations according to person, number and gender of both subject and object, for this verb. This is shown in table xx112.

Table 112. Inflection of the verb fue 'see'
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{\(\mathrm{A} \backslash \mathrm{P}\)} & \multirow[b]{2}{*}{1SG} & \multirow[b]{2}{*}{2SG} & \multirow[b]{2}{*}{3SG.NF} & \multirow[b]{2}{*}{3SG.F} & \multirow[b]{2}{*}{1PL} & \multirow[b]{2}{*}{2PL} & \multirow[b]{2}{*}{3PL} & \multicolumn{2}{|l|}{inanimate} \\
\hline & & & & & & & & 3PL.NF & 3PL.F \\
\hline 1SG & & fue & fue & fu & & fe & fe & fe & fu \\
\hline 2SG & fue & & fue & fu & fe & & fe & fe & fu \\
\hline 3SG.NF & fue & fue & fue & fu & fe & fe & fe & fe & fu \\
\hline 3SG.F & fu & fu & fu & fu & fe & fe & fe & fe & fu \\
\hline 1PL & & fue & fue & fu & & fe & fe & fe & fu \\
\hline 2PL & fue & & fue & fu & fe & & fe & fe & fu \\
\hline 3PL & fi & fi & fi & fu & fe & fe & fe & fe & fu \\
\hline
\end{tabular}

According to this table the clause 'They saw her' will code the verb with the feminine form fu, and that the first of the putative sentences shown above, *te pe te=fe, is ungrammatical. We can also see that there are a total of four forms of the verb involved in the paradigm, fue, fu, fi and fe. The selection of the appropriate form of the verb is based on a parsing algorithm according to the following set of features assigned to each form, in addition to the lexical specification that is common for all forms of the verb for 'see':

Table 113. Features associated with the separate vowel-differentiated forms of 'see'
\begin{tabular}{|c|c|c|c|c|}
\hline & F & (3)PL & ANIM & OBJ \\
\hline fe & . & + & + & + \\
\hline fi & . & + & . & \\
\hline fu & + & . & . & . \\
\hline fue & . & & & \\
\hline
\end{tabular}

That is, the form fi is specified only as bearing the feature PL for its subject or object, the agreeing argument of fu only bears the feature 'feminine', and fue itself is unmarked for any grammatical information. The frequently-occurring fe (see table 112 xx ) is highly specified, annotated for the features plural, animate, and object.

Note also that fi can only occur with a third person plural subject, whereas fe occurs with any person, as long as it is plural (and, of course, the object of the clause). This is part of a consistent difference in the application of vowel alternations, which depends on whether they are used to code features of the subject or the object. In the same vein, the feminine form fu is
not completely restricted to singular, but can be used with plural nouns if they are both inanimate and the object (and, naturally, feminine!). This is part of the regular asymmetry between animate and inanimate referents in gender marking that is attested elsewhere (see 10.2). Table 114xx shows the conditions under which the feminine or the plural vowel alternations will be used, depending on the animacy of the subject or object that they code (shown in the left-hand column). If the vowel alternations mark a subject that is animate, then feminine vowel alternation forms may be used to mark a third person singular subject, or plural forms to mark a third person plural. On the other hand, the most extreme alternative can be found if the vowel alternations are used to code an object that is inanimate, in which case we find that the feminine forms can be used to code either a third person singular or a third person plural argument. The plural forms are not used to mark a third person plural argument.

Table 114. Asymmetries in the marking of gender for subject and object


It would intuitively appear that 3PL.F objects, when inanimate, should be eligible to be marked by either the plural form or the feminine form. That the feminine form is the one selected shows the salience of gender marking over plural marking, at least in this part of the system. On the other hand, plural feminine arguments, when animate, are coded as plural rather than feminine when subject. Examples of the use of this system can be seen with the following sentences. The first two show that when there is a plural animate subject, the verb must be marked for the plural feature, regardless of any feminine gender values that might be present on the nominal. Marking the verb as feminine, as in (74)', is not grammatical.
subject is third person plural feminine animate: verb vowel marks plural
\begin{tabular}{|c|c|c|}
\hline Kungpáue & hítong & te=fi. \\
\hline spider.F & blowfly.NF & \(3 \mathrm{PL}=\) see. PL \\
\hline
\end{tabular}
* kungpáue hítong te=fu.
spider.F blowfly.NF 3PL=see.F
When a plural feminine subject is inanimate, on the other hand, the verb is marked as feminine, not as plural. Here the inanimacy of the referent overrides the need to mark plurality.
subject is third person plural feminine inanimate: verb vowel marks feminine
\[
\begin{array}{lccll}
\text { Hóeng nawò mong tue } & \text { pì } & \text { lo-pí. }  \tag{75}\\
\text { valley.F many } & \text { F.sit } & \text { 3SG.F.do mountain } & \text { direction-south } \\
\text { 'Many valleys are behind the mountains.' }
\end{array}
\]
\[
\begin{array}{llllll}
\text { * hóeng } & \text { nawò } & \text { meng } & \text { ti } & \text { pì } & \text { Io-pí. }  \tag{75}\\
\text { valley.F } & \text { many } & \text { 3pL.sit } & \text { 3PL.do } & \text { mountain } & \text { direction-south }
\end{array}
\]

When the subject is neither third person nor plural the verb is not marked according to the inflectional umlaut agreeing with values of the subject, regardless of the actual sex of the referent. The subject in the sentence below can be interpreted as either male or female, with no
change in the morphosyntactic encoding (exactly the same patterns are found for second person subjects; this verb inflects for plural subjects, so sentences with 1PL or 2PL subject will differ.
non-feminine animate object \& first person, non-plural subject: verb vowel unchanged for gender of subject
(76) Nì páng-pé-pè=pe nì-fue. 1SG husband-3SG.F.DAT-3SG.F.GEN=3SG.F.DAT 1SG-see 'I \({ }_{\text {male/female }}\) saw her husband.'
(76)' * nì páng pé pè pe nì fu
'I Imale/female saw her husband.'
feminine animate object \& first person, non-plural subject: verb vowel unchanged for gender of subject
(77) Nì fáfa-pè=pe nì-fu. 1SG husband-3SG.F.GEN=3SG.F.DAT 1SG-see.F
'Imale/female saw her aunt.'
(77)' * nì fáfa pè pe nì fue
'I \({ }_{\text {male/female }}\) saw her aunt.'
feminine non-animate object \& first person, non-plural subject: verb vowel unchanged for gender of subject
Nì lúng nì-fu.
1SG fly.F 2SG-see
'I \({ }_{\text {male/female }}\) saw the fly/flies.'
(78)' * nì lúng nì fue
'I \({ }^{\text {male/female }}\) saw the fly/flies.'
non-feminine non-animate object \& first person, non-plural subject: verb vowel unchanged for gender of subject
(79) Nì óngmi nì-fue.

1SG firefly.NF 2SG-see
'I \({ }_{\text {male/female }}\) saw the [firefly / * fireflies].'
(79)' * nì óngmi nì fu
'I \({ }_{\text {male/female }}\) saw the [*firefly / fireflies].'
How do we resolve which of these forms is used when there is potential conflict? In addition to these features, there is a principle of object saliency: where it is possible to parse features associated with the object, they take precedence over parsing features associated with the subject. Thus in the sentence
(80) Pe te \(\mathrm{pe}=\mathrm{fe}\).

3SG.F 3PL 3SG.NF=see.PL.ANIM.P
'She saw them'
(81) * pe te pe fu
(82) * pe te pe fi
the form fu is not found, because it codes for the feminine feature of the subject, not the plural of the object. The form fi is blocked from appearing because the features in fe are more specific to the coding requirements of the clause. On the same principles
(83) Te pe te=fu.

3PL 3SG.F 3PL=see.F
'They saw her.'
uses the feminine form, and not the plural, because feminine is the feature present on the object. Compare with
\begin{tabular}{lll}
Te & ke & te=fi. \\
3PL & 3SG.NF & 3PL=see.PL
\end{tabular}
'They saw him.'
which uses forms coding values for the subject because there are no form that parse the features 'singular' and 'non-feminine'. When no argument in the clause contains any of the features feminine or (third person) plural, then the base form fue is used.

To return to the question posed in the discussion of (73), we can now answer: the coding quandary is resolved in favour of the object. The grammatical rendering of 'They saw her.' into Skou is thus:
(85) Te pe te \(=\mathrm{r}-\mathrm{u}\).

3PL 3SG.F 3PL=3PL-see.F
'They saw her.'
Not all verbs permit the vowel alternations to be so independent of the consonant prefixation. We saw earlier that the verb lue 'hear', and saw that it is one that shows vowel alternations for subject. The full paradigm of this verb is as shown in table 115xx.

Table 115. lue 'hear', inflected for subject and object
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{A \P} & \multirow[b]{2}{*}{1SG} & \multirow[b]{2}{*}{2SG} & \multirow[b]{2}{*}{3SG.NF} & \multirow[b]{2}{*}{3SG.F} & \multirow[b]{2}{*}{1PL} & \multirow[b]{2}{*}{2PL} & \multirow[b]{2}{*}{3PL} & \multicolumn{2}{|l|}{inanimate} \\
\hline & & & & & & & & 3PL.NF & 3PL.F \\
\hline 1SG & & lue & lue & lu & & Ii & Ii & Ii & lu \\
\hline 2SG & pue & & pue & pu & pi & & pi & pi & pu \\
\hline 3SG.NF & lue & lue & lue & lu & Ii & Ii & Ii & Ii & lu \\
\hline 3SG.F & ru & ru & ru & ru & ri & ri & ri & ri & ru \\
\hline 1PL & & rue & rue & ru & & ri & ri & ri & ru \\
\hline 2PL & lue & & lue & lu & Ii & & Ii & Ii & lu \\
\hline 3PL & ri & ri & ri & ru & ri & ri & ri & ri & ru \\
\hline
\end{tabular}

Clearly the amount of variation here is not too extreme (there are only nine separate forms in the table above), but the principles underlying the selection of the form that is appropriate for a given cell in the paradigm is not simple.

\subsection*{7.2.3.1 Defective vowel paradigms on verbs with vowel alternations}

The vowel alternations described above are obligatory for the verbs that lexically specify their application. That is, speakers uniformly and unexceptionally inflect verbs by means of vowel alternations when that verb is one that specifies vowel alternations (amongst other morphological mechanisms) as part of the agreement system, and for verbs that are not lexically specified as having vowel alternations as part of their agreement system, they do not inflect. There has been no observed variation in this: speakers are unanimous in their application, or non-application, of vowel alternations on verbs.

These same speakers, however, occasionally show some divergence from this ideal model. In texts we occasionally find instances of verbs in which the vowel alternation is not realised; when transcribing texts, speakers consistently render these verbs with the vowel alternation added. If questioned about the quality of the vowel, they usually question the quality of the recording, denying that the verb occurred without the 'correct' alternation. One particularly interesting example can be seen in the following extract from a text (Te Lóngpa táng te te, line 11 ), in which the non-vowel alternation form of the verb appears immediately following the same verb wITH vowel alternations. This is shown in (86).
\begin{tabular}{|c|c|c|c|c|}
\hline pa & te=r-oe & tu & me & \\
\hline \multicolumn{5}{|l|}{\multirow[t]{2}{*}{3PL=3PL-get.PL-RED=INSTR 3PL=3PL-get
'they get them and they take them home, ...}} \\
\hline & & & & \\
\hline \multicolumn{5}{|l|}{(Expected (and also grammatical): te rí rí pa te ri tu me toe)} \\
\hline
\end{tabular}

The reasons for the occasional omission of lexically prescribed vowel alternations are not known, and (given native speaker denial of the phenomenon) cannot easily be investigated. There are too few recorded instances to be able to judge from the available textual material.

\subsection*{7.2.3.2 The absence of vowel alternations in some verbs}

At the start of 7.2 .3 we examined the patterns of vowel alternations found on verbs with different rimes, and the semantic significance of these alternating vowel patterns. We also investigated the principles behind selecting the vowel alternation that is realised when the conditions are appropriate for more than one vowel alternation on the one root.

Despite the regular patterns that we can specify for the appearance of these vowel alternations, there are still exceptions to the patterns. In table 111xx we saw the alternations for leng 'give'; a phonologically comparable verb is peng 'forget'. Because it is p-initial it does not show consonant alternations, but nevertheless its verbal status can be established through the consistent appearance of proclitics on the verb when predicative; recall from 5.5 and 7.2.1 that adjectives do not appear with proclitics unless they have an inchoative reading. Apart from the initial consonant, then, peng and leng are identical: they have the same phonological rimes, with identical tone and nasalisation settings. Nonetheless, peng does not show any inflection for number or gender of either subject or object by means of vowel alternations. We might argue that peng is a verb that cannot take any agreement marking: its phonological shape, an initial bilabial stop, precludes any prefixing paradigm, and this might be concomitant with vowel alternations. Vowel alternations are attested regardless of whether the verb is prefixing or not prefixing; on the other hand, there are verbs with prefixing alternations that show no vowel alternations, such as loe 'come', or há hi 'count'. Compare the verbs in the partial paradigm shown in table 116xx. Although the first two verbs show identical rimes, eng/e/ and the same suprasegmental features (nasalised, low tone), one shows vowel alternations and one does not. Similarly with lóeng and hóeng, which both share the same rime óeng 这/, the same suprasegmental features, and in which lóeng shows vowel alternations, and hóeng does not (both the verbs show agreement by prefixation).

Table 116．Lexical specification of vowel inflections
\begin{tabular}{|c|c|c|c|c|}
\hline & & Plural & Plain & Feminine \\
\hline leng & ＇give＇ & ling & leng & lung \\
\hline peng & ＇forget＇ & peng & peng & peng \\
\hline lóeng & ＇say＇ & líng & lóeng & lúng \\
\hline hóeng & ＇wait for＇ & hóeng & hóeng & hóeng \\
\hline
\end{tabular}
（The verbs are shown without the application of prefixal marking for 3PL or 3SG．F inflection．With consonant changes shown as well＇give＇is realised as ring：leng：rung，＇say＇as ríng：lơeng：rúng，and＇wait for＇as jóeng：hóeng：wóeng）
We have seen that，just as with prefixal agreement，although there are phonological constraints on which verb roots are eligible for marking agreement，these constraints can only be taken to exclude some roots，and do not provide a list of all the items that are included．Just as prefixal agreement is a feature that must be lexically stipulated for each verb root，so too must the question of whether a verb shows vowel alternations or not．

\section*{7．2．3．3 A comparative note：vowel alternations in related languages}

The pattern of vowel alternations described in 7.2 .3 is not unique to Skou，but is found in other languages in the family．Although some degree of vowel alternation is regular in the Macro－ Skou languages，it appears to be most regular in Skou compared to the other languages．While none of these languages have object marking affixes such as are found in more distant relatives， there is evidence of vowel alternations，though not as easily describable as for Skou．

As an example of vowel alternations in a related language，examine the Nyao paradigms for the verbhipup＇see＇，which shows alternations for feminine and for plural objects，just as does the same verb in Skou．The changes from the basic form are shown in bold．

Table 117．Nyao inflections of＇see＇
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & \multicolumn{2}{|l|}{Plain} & \multicolumn{2}{|l|}{Feminine} & \multicolumn{2}{|l|}{Plural} \\
\hline 1SG & hiefpu & Ø－hiil－\(\varnothing\)－pu & hëpe &  & hêpi & \(\emptyset\)－hê－\(\varnothing\)－pi \\
\hline 2SG & hunufu． & m－hitiom－pu & hmefe & m－h6e－m－pı & hmefi & m－hen－m－pi \\
\hline 3SG．NF & kilku & \(\mathrm{k}-\mathrm{hiti-k}-\mathrm{pu}\) & kE゙k \({ }_{\text {w }}\) & k－hê－k－pe & kekwi & \(\mathrm{k}-\mathrm{h} \hat{\text { en－k－pi }}\) \\
\hline 3SG．F & bimufu & f－hiti－f－pu & hmefe & f－hê－f－pe & hêfe & f－h⿺尢丶－f－pe \\
\hline 1PL & hipuwu & n －hini－n－pu & hinewe & n－hê－nı－pe & hunewi & n －hê－n－pi \\
\hline 2PL & hilipu & \(\emptyset\)－hiii－\(\varnothing\)－pu & hêpi & Ø－ヶ⿺尢－Ø－рі & hêpi & \(\emptyset\)－hë－\(\varnothing\)－pi \\
\hline 3PL & hipuwu & y－hiti－y－pu & hipewi & \(\underline{y-h e ̈-y-p i ~}\) & hpewi & \(\underline{y-h e ̂-y-p i ~}\) \\
\hline
\end{tabular}

Since both the feminine and plural columns have［ \([\) ］as the vowel of the first syllable，that cannot be counted as marking either feminine or plural features．The second vowel，however，is consistently front for the plural marking verbs，and usually high．On the other hand the second vowel of the feminine forms is lower，as might be expected for the feminine for of a back vowel in Skou．The 2PL and 3PL forms show interference from the plurality of the subject，even though this is not found in the plain paradigm．

Some further aspects of Nyao inflection，as they are relevant to an understanding of Skou grammar，can be found in 7．8．1

\subsection*{7.2.4 Stem suppletion}

Having completely separate stems for different paradigmatic 'inflections' of a verb is not a very common means of showing agreement with an argument, but a few verbs do use it, usually based on the number of the absolutive argument. One such verb is 'get', which has the base lóe for plural objects, wé for feminine objects, and ké in the unmarked case. For instance, with the inherently gendered nouns móe 'fish'(feminine) and moelíue 'turtle (sp.)' (non-feminine), using both plural and singular forms, we find the following patterns.

Non-feminine object
\begin{tabular}{ll} 
M oelíue \\
small.turtle(sp.) & (áling) ke=ké. \\
one & 3SG. NF=get
\end{tabular}
'He got (one) turtle.'
Feminine object
Móe (áling) ke=wé.
fish one 3SG.NF=get.F
'He got one fish.'
Plural objects
Móe nawò ke=lóe.
fish many 3 SG.NF=get.PL.P
'He got many fish.'
\begin{tabular}{lll} 
Moelíue & nawò & ke=lóe. \\
small.turtle(sp.) & many & 3SG.NF=get.PL.P \\
'He got many turtles.' &
\end{tabular}

In each example above the form of the verb used is the only one possible for that sentence, and it is not acceptable for one of the other verbs to be used. In the second example móe 'fish' is feminine, and so the verb used must match the feminine gender, if the object is singular. In the last examples we can see that, regardless of the gender of the noun, if the referent is plural, then plural number must be indexed by the choice of verb. Various ungrammatical possibilities are shown in (91) - (93).
(91) * móe nawò ke wé, * móe (nawò) ke ké
(92) * móe áling ke lóe, * móe (áling) ke ké
(93) * moelíue áling ke lóe, * moelíue ke wé

Unlike the similar cases of verbal agreement with features of the object being expressed through vowel alternations, we cannot identify any plausible common root for the three verb stems that we can see with 'get'. It is true that the same values for tone and nasality are found in all three forms of the verb, and it is just within the bounds of plausibility for the vowels of the three verbs to be related to each other, though it would be an irregular paradigm (compare the \(0 \mathrm{e}-\mathrm{e}-\mathrm{i}\) paradigm seen here with the other, more common, paradigms described in 7.2.3). There is no precedent, however, for the sort of alternation that we would need to posit to account for the initial consonants of the verb stems, as the regular verbs show nothing like the \(1-k-w\) alternation that is observed here.

Another verb that shows suppletive forms depending on the features of the object is ká 'hit'. This verb is best thought of as having three distinct stems, though one is clearly derived from one of the forms of the unmarked stem. The different forms of 'hit' are shown in table 118xx.

Table 118. Conjugation of the verbs 'hit'
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{\(\mathrm{A} \backslash \mathrm{P}\)} & \multirow[b]{2}{*}{1SG} & \multirow[b]{2}{*}{2SG} & \multirow[b]{2}{*}{3SG.NF} & \multirow[b]{2}{*}{3SG.F} & \multirow[b]{2}{*}{1PL} & \multirow[b]{2}{*}{2PL} & \multirow[b]{2}{*}{3PL} & \multicolumn{2}{|l|}{inanimate} \\
\hline & & & & & & & & 3PL.NF & 3PL.F \\
\hline 1SG & & ká & ká & láng & & jí & jí & jí & jí \\
\hline 2SG & bá & & bá & páng & jí & & jí & jí & jí \\
\hline 3SG.NF & ká & ká & ká & láng & jí & jí & jí & jí & jí \\
\hline 3SG.F & wá & wá & wá & wáng & jí & jí & jí & jí & jí \\
\hline 1PL & & ká & ká & táng & & jí & jí & jí & jí \\
\hline 2PL & ká & & ká & láng & jí & & jí & jí & jí \\
\hline 3PL & já & já & já & jáng & jí & jí & jí & jí & jí \\
\hline
\end{tabular}

The verb forms in the column for singular (non-feminine) object (starting with ká) are consistent with inflection on a \(k\)-initial verb, just as the forms for singular, feminine objects (the láng column)show regular inflection for an l-initial verb. The plural object forms are plausibly derived from the non-feminine form of the verb, with vowel modification, though the change of the stem to \(j\)-, from \(k\)-, is unexplained, though likely to be formed by analogy with the inflection on the 3pL subject forms. The change in the vowel for the plural form could be attributed to the regular process of vowel alternation described in 7.2 .3 , though we would expect kí, and not jí. As with the various forms of 'see', we can analyse the forms of 'hit' according to their grammatical features:

Table 119. Features associated with the suppletive forms of the verb 'hit'
\begin{tabular}{|c|c|c|c|c|}
\hline & F & (3)PL & ANIM & OBJ \\
\hline jî & . & + & & + \\
\hline já & . & + & . & . \\
\hline láng & + & . & . & . \\
\hline ká & . & . & & \\
\hline
\end{tabular}

The categories that are relevant here are the same as those which were found with 'see' earlier, and the same sets of features describe them, showing that, even though the morphological realisation of these features is very different from one verb to another, the set of distinctions and their relationship to each other is (approximately) constant.

\subsection*{7.2.4.1 Plural marking}

The restriction of plural marking for objects to apply only to animate nouns can be seen in the following example. Here the interpretation of tang must be plural, because of the NP-internal quantifier nawò. Despite this clearly forced plurality, the verbal agreement does not reflect a plural feature, but shows feminine gender.
Tang nawò nì=fu.
\[
\text { canoe many } 1 \mathrm{SG}=\text { see. } \mathrm{F}
\]
'I saw many canoes.'
(94)' * tang nawò nì=fe

Compare this with the verbal marking associated with a plural feminine human noun, which will indicate plurality, not femininity:
```

(95) Te=ueme nawò nì=fe.
3PL=woman many 1 SG=see.ANIM.PL. $P$
'I saw many women.'
(95)' * te=ueme nawò nì=fu

```

That this is an animate:inanimate distinction, and not a human:nonhuman one is shown by the following sentences, both with feminine nouns. In the first case, where the object, móe héngtong, is animate and plural, the verb agrees with the plurality by the use of the fe form. In the second example, however, although rítóe héngtong is plural, the verb shows (singular?) feminine agreement, because the object is inanimate.
(96) Pe móe héngtong \(\mathrm{pe}=\mathrm{fe}\).

3SG.F fish three 3SG.F=see.ANIM.PL.P
'She saw three fish.'
(96)' * pe móe héngtong pe fu
(97) Pe rítóe héngtong \(\mathrm{pe}=\mathrm{fu}\).

3SG.F tree three 3SG.F=see.F
'She saw three trees.'
(97)' * pe rítóe héngtong pe fe

We can draw the following conclusions about the hierarchical importance of marking of the features [plural] and [feminine] on the verb, which show different rankings in terms of their representation with different kinds of arguments:
- features of the object are marked in preference to those of the subject, if there is a clash of possibilities;
- [feminine] can only be marked for third person arguments;
- [plural] can only be marked for third person, unless they are both animate and the object, in which case plural marking extends to first and second person as well;
- [feminine] is restricted to singular arguments, unless they are both inanimate and plural, in which case feminine marking extends to plural as well.
It is clear that there is a preference for morphological plural marking with animate arguments, and morphological gender marking with inanimates. The fact that plural marking on objects is only found with first and second persons if animate is not surprising - a first or second person will always be animate, by definition of its participation in the speech act. The restriction of feminine marking to third persons is cross-linguistically not surprising, though it is worth noting that languages related (distantly) to Skou, in the Serra Hills and Piore River families, show gender marking in the second person, and in both second person and first person, respectively. Also, the fact that dual pronouns in Skou show gender in all persons does give a precedent for gender marking on first or second person, but this is not found.

The appearance of feminine marking, in preference to plural marking, on inanimate (but not animate) referents is discussed in chapter 16.

\subsection*{7.2.5 Inheritance trees and the regularities in Skou suppletion and vowel alternation}

Similarly to the inheritance trees developed from examining the different ways in prefixal paradigms are built up, we can examine the different kinds of distinctions that are present in the marking of pronominal features by either stem-suppletion or vowel alternation in verbs. Table 120 xxx shows the kinds of distinctions we need to make; the material is largely the same as that seen in 7.2.3.

Table 120. The development of number of contrasts in suppleting verbs


Building an inheritance tree for the features and their relationships here we find that (97) is the best representation:

Inheritance tree for Skou suppletion and alternation
(98)


Where the plural values were at the bottom of the tree with prefixation, in this tree we see that they appear at the first branch. This noteably reflects the arguments that are being indexed by these features: the prefixing tree represents the divisions and complexities found in indexing nominative arguments: the S or A of a clause. With suppletion and vowel alternation typically it is an S or a P , that is an absolutive argument, that is being indexed. Clearly there are different preferential hierarchies depending on which arguments are referred to. This division is found elsewhere in the grammar, with, for instance, floating quantification referring to an S or P grouping, while switch reference is sensitive to an \(S\) or A grouping. Further details on verbal disagreement, and how prefixal patterns are distinct from suppletive/alternating patterns, and also how the kind of argument that is indexed by these agreement strategies affects their behaviour, can be found in 7.8, 7.9.3, 7.9.4, 12.3.2 and 12.4.

\subsection*{7.3 The status of verbal agreement}

We have seen that there is extensive agreement on the verb in Skou, though in most cases all of the agreement present will be found to be marking the same argument. In the light of investigations into the status that pronominal agreement takes in different languages (see, for instance, Andrews 1990, or Song 2001), it is instructive to examine the issues for Skou concerning the status of the agreement on the verb as simply indexing an argument, or functioning as the argument itself.

The function of verbal agreement can be empirically organised into three distinct categories, depending on the degree to which the information represented by the verbal agreement marker can be or must be repeated elsewhere in the clause. We can characterise these different patterns as follows:

Weak agreement: attested in Germanic languages such as English, Dutch, etc., and others. The presence of agreement on the verb does not license the clause to appear without an overt subject (pro)noun.
Strong agreement: most widely attested agreement status across the world. The presence of a fully-specifying agreement marker on the verb obviates the need for a free (pro)nominal that is no more contentful than the agreement marker.
Hyperstrong agreement: attested in Irish, Woleaian, Salish and others. The appearance of an agreement marker on the verb is in complementary distribution with the appearance of free (pro)nouns.
In terms of a formal model of grammar the different forms of agreement can be thought of as differing in terms of whether or not, or how, they specify actual pronominal information. Weak agreement does not function pronominally: it specifies [PRO -]. Hyperstrong agreement, on the other hand, is always pronominal in nature, and so can be taken as specifying [PRO +]. In between these two extremes, strong agreement is contextually determined as pronominal or not; it specifies \([\mathrm{PRO} \pm\) ], allowing a pronominal interpretation when there is no noun or independent pronoun filling the phrase-structural position for subject, but assuming full pronominal status in the absence of this filler. It is not the case for simple strong agreement that the agreement morphology is necessarily pronominal, since we can show (see Chapter 3) that a nominal subject does not necessarily bear a topic relationship to the rest of the clause.

Examples of these different patterns are shown in the following sentences. In the first set, we can see that in Dutch both agreement on the verb, and a free pronoun are required to render a sentence grammatical. Neither the free pronoun nor the verbal agreement on its own is sufficient, nor is a clause without a free pronoun and without inflection on the verb grammatical with the translation given.

Weak agreement: Dutch
\begin{tabular}{llll} 
Hij & kijk-t & naar & mij. \\
3sG.m.NOM & look-2/3SG & to & 1SG.ACC \\
'He's looking at me.' & &
\end{tabular}
(100) * hij kijk naar mij, * kijkt naar mij, * kijk naar mij

This is exactly the pattern found in agreement in English (which has fewer overt morphological exponents of agreement than does Dutch), and as such is familiar from its frequent discussion in the linguistics literature.

As Klamer (1998: 60-61) points out, however, this is far from being the post prominent pattern cross-linguistically: rather than the weak agreement pattern being common, we find that strong agreement prevails. An example of strong agreement can be gathered from Tukang Besi (and many, if not most, other languages). In Tukang Besi (Donohue 1999) both a free pronoun and verbal agreement may occur together in the same clause(with some pragmatic effects
concomitant with certain choices: contrastive focus, or emphatic assertion of identity). In addition to this, a clause consisting of the verb alone (with its agreement morphology) is grammatical, as can be seen in (103), but on in which the verb appears without agreement morphology is not (with the non-imperative translation we are assuming), even if there is a free pronoun in the clause. \({ }^{44}\)

Strong agreement: Tukang Besi
\(\begin{array}{lll}\text { (101) } & \begin{array}{l}\text { No-wila } \\ \text { 3R-go na } \\ \\ \text { 'HE went.' }\end{array} & \text { NOM } \\ & \text { ia. } \\ & \end{array}\)
(102) No-wila.
'He went.'
(103) * wila na ia, * wila

This pattern can be referred to as strong agreement, more robust than the weak agreement patterns already described, but less extreme than the hyperstrong agreement to be presented in the following paragraph. Since the pronominal marking on the verb is enough to carry the parsing load required by the language, but is not so strong as to prohibit a free nominal or pronominal.

Hyperstrong agreement is attested in a range of languages, most well known from various varieties of Irish. In Ulster Irish there is a choice within the one verbal paradigm of a sentence being composed of an inflected verb form with no free pronoun, or an uninflected verb form with a free pronoun. Unlike the previous examples from Dutch and Tukang Besi, however, in Irish it is not grammatical for both the verbal inflection and the free pronoun to occur in the same clause. The following examples show that it is grammatical for the verb to appear inflected for 2 SG , or for the uninflected verb to appear with an independent 2 SG pronoun. It is not, however, grammatical for both the independent pronoun and the bound inflection to appear in the same clause, and equally it is not grammatical for neither of them to be used (if we wish to preserve a 2 SG interpretation), leaving simply a verb, cuireann, uninflected for person and number.

Hyperstrong agreement: Ulster Irish
(104) Cuirir.
put.PRES.2SG
'You are putting.'
(105) Cuireann tu.
put.PRES 2SG
'You are putting.'
(106) * cuirir tu, * cuireann

\footnotetext{
44 For both Dutch and Tukang Besi, as with English, the bare verb stems may be used as imperatives, thus Kijk naar mij in Dutch is grammatical with the translation 'Look at me!', and Wila in Tukang Besi is grammatical with the translation 'Go!' Note also that the Tukang Besi sentence in (101) is not an instance of a topical subject, so we cannot simply state that the prefix 'is' the argument, while the free pronoun is a coreferring topical adjunct. A contrastive topic would be marked in preverbal position: Te ia no-wila CORE 3SG 3R-go 'He or with a cleft Te ia na w<um>ila CORE 3SG NOM go.SI 'It was him who went.'
}

We can summarise the possibilities for what combination of pronominal elements may appear in the clause depending on the status of the agreement morphology in a language by examining table 121xxxx. Here each of Germanic (as seen in Dutch or English, amongst others), Tukang Besi (and representing the vast majority of the world's languages) and Irish (as well as a small minority of other languages) are displayed according to whether co-occurrence is possible, or even omission of an element. In the Germanic and the Tukang Besi pattern agreement on the verb is obligatory, while only in Germanic is a free pronoun also required. The Irish pattern is unusual in allowing, and requiring, either, but not both, of the pronominal occurrences. If there is agreement on the verb, then a free pronoun cannot be present, while if there is a free pronoun, that dictates that there can be no agreement on the verb.

Table 121. Agreement patterns and morphosyntax
\begin{tabular}{lccl}
\hline \hline & \begin{tabular}{c} 
In the presence of a \\
free pronoun,
\end{tabular} & \begin{tabular}{c} 
can we also find \(\ldots\) \\
Agreement on verb?
\end{tabular} \\
\hline Germanic & + & + & Weak agreement \\
Tukang Besi & \(+/-\) & + & Strong agreement \\
Irish & \(\alpha\) & \(-\alpha\) & Hyperstrong agreement \\
\hline \hline
\end{tabular}

In Skou, the verb usually shows agreement with subject by more than one morphological means, and sometimes shows agreement for more than one argument. The following morphological forms of agreement are found:
- clitic agreement for subject;
- prefix agreement for subject;
- vowel alternations in the verb:
- based on the features of the subject;
- based on the features of the object;
- stem suppletion based on the features of the S (for monovalent verbs) or P (for bivalent verbs).

We shall examine these in turn in the following sections, and evaluate the patterns found in each case in terms of what sort of agreement they display.

\subsection*{7.3.1 The status of clitic agreement}

Must work has been published on the status of agreement patterns, summarised in the preceding section. The following patterns of clitic agreement are relevant to an investigation of their status on verbs:
1. nominal (as opposed to pronominal) subjects always display clitic doubling on the verb;
2. dual pronominal subjects always display both the free pronoun and a clitic, unless phonological reduction takes place;
3. third person subjects always display both the free pronoun and a clitic unless embedded in discourse;
4. first or second person singular or plural (not dual) subjects often appear without a free pronoun, but always with a clitic; this is found with a more restricted occurrence with third person singular or dual subjects, as described in 3. above.
The first observation is based on sentences such as the following, which show that a clitic pronoun must occurs regardless of the presence of a nominal representing that argument in the sentence.
(107) Ke=bà=ing a táng \(k e=y u ́-y u ́ . ~\)

3SG.NF=person=the bird 3SG.NF=search-RED
'That man is going to look for birds.'
\[
\begin{aligned}
& (107)^{\prime} \text { * ke bà ing a táng yúyú } \\
& (107) \text { * táng ke yúyú }
\end{aligned}
\]

The obligatoriness of both the clitic agreement marker and the free DP in the clause shows that the clitics are not hyperstrong agreement markers, and in these sentences do not serve as full pronominal arguments of the verb by themselves (see the arguments in Bresnan and Mchombo 1987, and the references therein, also Jelinek and Demers 1994). At the least, they allow the option of a nominal argument in normal argument position. \({ }^{45}\)

The second observation is based on the fact that the pronominal clitics do not code as much information as is found in the dual pronouns. Recall (from 6.3) that the pronominal clitics show only a singular/non-singular distinction, and so do not code for the category plural. Furthermore, apart from the third person singular forms, the clitics do not mark gender, whereas the dual pronouns all distinguish gender in all persons. For these reasons, when the number of the subject is dual the presence of a clitic alone is not enough to code the pronominal features that the subject expresses, and so both clitic and free pronoun appear. This fact, and the one exception to it, has been discussed in 7.2.1.1.

The third fact, that of third person clitics not appearing without an independent free pronouns, shows that, extending the analysis presented in the discussion of the first factor, the pronominal clitics (for third person at least) are not only optionally non-pronominal, they are in fact obligatorily non-pronominal: the agreement that they mark is always weak agreement, to use the terminology defined earlier in this section. Compare the sentences in (107) and (107)' with the following, which shows that even with a pronominal subject, the clitic is required, but is not sufficient for a grammatical sentence:
(108) Ke táng \(k e=y u ́-y u ́\).

3SG.NF bird 3SG.NF=search-RED
'He is going to look for birds.'
(109) Táng \(k e=y u ́-y u ́\).
bird 3SG.NF=search-RED
'The bird looked around.'
(Possibly, but most unlikely, interpretable as 'He is going to look for (the) bird(s).')

This demonstrates that the pronominal clitics are, in fact, purely agreement markers, and do not necessarily bear the feature [pronominal]. We cannot state categorically that the clitics are

45 The non-topicality of the subject in (107) can be demonstrated by the grammaticality of a topicalised object in this sentence: Táng a ke bà ing a ke yúyú, or by the neutral position of a time expression, which must precede ke bà ing a: Bàng ke bà ing a táng ke yúyu.
agreement markers that are never pronominal, because in many cases, especially with monovalent verbs, only the clitic appears. Examine the following sentences, in which it is clear that the preferred coding is with both a free pronoun and a clitic, but that the free pronoun can be omitted in the right contexts. It is ungrammatical to omit the clitic, and the omission of a free pronoun is infelicitous without the right context, but if we have already established the referent in the preceding discourse, as is presupposed in (109), then there is no question as to the complete acceptability of the clause with only a pronominal clitic. Indeed, the appearance of a free pronoun in the second clause would be highly marked, and probably indicate reference to a different person than the one referred to in the first clause.
(110) Pe pe=ló weng. 3SG.F 3SG.F=eye.F sleep 'She's sleeping.'
(111) * pe ló weng
(112) \# \(\mathrm{Pe}=\) ló weng
(113) \(\mathrm{Pe}=\) angku=inga pe=moe te pá=ko pe=ló weng. 3SG.F=child=the 3SG.F=return 3SG.F.go house=OBV 3SG.F=eye.F sleep 'The girl went back home and slept.'
(114) \# Pe angku ing a pe moe te pá ko pe pe ló weng.

In evaluating the data here, recall that the free pronouns and the clitics can be distinguished by the ability of the clitics to appear with a reduced vowel, whereas the free pronouns are always pronounced with a front vowel; the difference between (111) and (112) is thus more than just a 'trick' difference in representation, and does reflect real data. If (111), with a noncliticised pronoun preceding the noun, was grammatical, it would forbid the pronunciation [pelowe], showing the reduced vowel associated with a clitic realisation of the pronoun. This pronunciation is in fact acceptable, while *[pelowe], the transcription that would be associated with (111), is unacceptable. Further evidence that clitics, such as seen in (112), and free pronouns, as in (111), must be analysed separately comes from tone spreading (2.3.1). The pitch realisations on (111) is [ [---], never *[|-_] with the H of ló spread onto the free pronoun pe. (112), on the other hand shows both variants: both [|---] and [|- \(]\) are acceptable.

An exception to the requirement that third person subjects must be expressed by both clitic and free pronoun emerges when no phonological material intervenes. In, for instance, the sentence 'She's sleeping' above there is no intrusive material between the pe that is the free pronoun and the pe that is the clitic. There is no sentence-internal nominal that could be interpreted as the antecedent of the clitic pe. Given these conditions, the sentence can appear with no free pronoun, provided that the preceding discourse does not provide potential ambiguity. In sentence (112) above pe=ló weng is only acceptable under these circumstances, namely when embedded in a discourse context: it is not acceptable as a context-free translation of the sentence 'She's sleeping / Dia ada tidor', and if presented to speakers will more often than not be rejected as an ungrammatical sentence. In the correct context, however, it is normal and acceptable. The following mini-dialogue presents one such plausible context for the use of a clause without a free pronoun or noun. Here the last clause in the exchange does not have an independent pronoun or an independent nominal subject. This is not necessary, because the identity of the subject in this final clause has been established beyond any possible confusion by the conversation in the previous seven clauses, narrowing down the possible range of referents
to a single individual. In this environment it is acceptable for the pronominal indexing on the verb alone to carry the full referential load in identifying the subject of the clause.
(115)
a. Ya-me-mè=me
pe=te
nè?
sister-2SG.DAT-2SG.GEN=2SG.DAT 3SG.F=3SG.F.go \(Q\)
'Where did your sister go?'
b. Ya-ne? Pe=inga pe=mong tue wi a!
sister-1SG.DAT 3SG.F=the 3SG.F=F.sit 3SG.F.do this
'My sister? She's sitting right here!'
c. Ka. Pe=bafàng-mè=me ka,

NEG 3SG.F=younger.sibling-2SG.GEN=2SG.DAT NEG pe=bahúe=wò=ing a pe=te nè?
3SG.F=elder.sibling=EMPH=the 3SG.F=3SG.F.go \(Q\)
'No, not your younger sister, your older sister, where's she gone to?'
d. Pe=ing a pe=moe te pá. \(\mathrm{Pe}=10\) ó weng.

3SG.F=the 3SG.F=return 3SG.F.go house 3SG.F=eye.F sleep
'She went home. She's asleep.'
A real textual instance of a clause appearing without any free pronoun or free nominals in core functions can be seen in the following extract (from Tangmoe, lines 58-65). In the second numbered line of this extract, given that the identity of the object being made, the canoes, has already been clearly and unambiguously established, it is not necessary to reiterate it at the beginning (though we can see that it is included as an afterthought following the end of the sentence - this supports the argument that omission of the independent (pro)noun is only contextually allowed, and is not really a purely grammatical pattern). The position where we might expect to find some pronominal (or nominal) reference is shown in the example with a [Ø] before the verb.
(116)
\begin{tabular}{llllll} 
Tang=ing, & tang & tang=ing a, & tangmoe & te=ti & ka. \\
canoe=DEIC & canoe & canoe=the & canoe.moe & 3PL=3PL.do & NEG
\end{tabular}
'Those canoes, canoes, those canoes, they don't make the tangmoe kind of canoes.'
A, [Ø] mong tue-tue Te Lúng=pa, Te Lángfa, Te tang,
uh F.sit 3SG.F.do-RED Ormu=INSTR Tanah Merah 3pL canoe
Te Láng=fue a=ing a.
Tanah Merah=that=the
'Uh, no they're (canoes) at Ormu, and at Tanah Merah, they (make) canoes,
that lot over in Tanah Merah.'

This analysis of purely grammatical agreement, as seen in Germanic, is complicated by the fourth fact listed at the start of this section, namely that we find very different behaviour with first or second person pronouns. The sentences used in this explication so far have shown that the third person clitics do not and can not function as the sole pronominal exponent in a clause. Compare this fact with the evidence of the clauses in (118) - (118)", in which the subject is first person (identical patterns are found with second person subjects, and (non-dual) plural subjects).
(118) Nì táng nì=yú-yú.

1SG bird 1SG=search-RED
'I am going to look for birds.'
(118)' Táng nì yúyú.
(118)" * nì táng yúyú

When the subject is first or second person, a free pronoun is optional; the clitic remains obligatory. From these four patterns presented above, we can now assess the pronominal status of the clitics. The relevant facts are that:
a. a pronominal clitic never excludes the use of an independent pronoun or nominal; this means that 'clitic doubling' is always allowed, and so the agreement clitics are never 'hyperstrong', in the terminology presented earlier.
b. third person clitics always require independent instantiation of the argument that they represent elsewhere in the clause; this is evidence that they are exponents of 'weak' agreement, never bearing the feature [pronominal].
c. first or second person clitics may appear with an independent pronoun in the clause, but do not have to; this implies that their status is as 'strong' agreement markers, since they optionally bear the feature [pronominal].
d. a dual subject is usually represented with a free pronoun even when, from the above constraints, we would expect the clitic alone to be sufficient. This is because the clitics do not show as many contrasts in number as are present on the free pronouns, critically they do not mark either dual number as distinct to generic non-singular, nor gender in the duals. The free pronoun, then, is the only way, short of numerical modification in the NP, to express that particular grammatical number.
These facts indicate that the first and second person clitics are examples of strong pronominal agreement, while the third person ones are weak. The other means of indicating agreement on the verb are also worth discussion, as they too show variable status. The following sections discuss prefixal agreement patterns, suppletive verb forms, and vowel alternations, the last of which need to be treated in two sections.

\subsection*{7.3.2 The status of prefixal agreement}

The various phonological forms taken by prefixal agreement have been described in 7.2.2; the status of these prefixes is unambiguous. In all cases this form of agreement represents a weak agreement system. In view of the fact that fully one third of all verbs do not inflect by prefixal agreement, and that there is no overt prefix for second person nonsingular in all cases, and first person singular in most cases (see table 102 xx ), it is not surprising that prefixal agreement should not have any pronominal status. Examining the formal exponence of agreement in the following examples, we can see that prefixal agreement is weak agreement for third persons. In all cases a free pronoun is required.

Pe móe pe=w-é e tue ná?
3SG.F fish 3SG.F=3SG.F-catch 3SG.F.be 3SG.F.do Y/N
'Is she fishing?'
(119)' * pe móe wé e tue ná?
(120) * móe pe wé e tue ná?
(120)' * móe wé e tue ná?

In this sentence not only is the proclitic insufficient for a grammatical sentence, but the prefixal agreement too does not satisfy the requirements of the clause for a pronominal element. It is, nonetheless, obligatory for a grammatical clause, as can be seen in the following sentence, in which the uninflected form of the verb ké (the initial \(k\) is part of the verb root) is used with no 3SG.F inflection by prefixation, and the result is ungrammatical.

\section*{(121) * pe móe pe ké e tue ná?}

While it might not be surprising that the third person prefixes is not pronominal in status, given that the corresponding clitics are also not pronominal, we find the same pattern for first and second person as well. In the following examples we can first note the difference in prefixal agreement: while all four clauses show agreement by clitic, the first and second persons do not, on any of the verbs attested here, have a prefix (in all cases the sentences have been presented without a free pronoun, which would be grammatical if present).
(122) Nì=ha 0 re báng i li. 1SG=walk seawards go beach be do 'I am going to the beach.'
Mè=m-a m-o me báng me pi. 2SG=2SG-walk 2SG-seawards 2SG.go beach 2SG.be 2SG.do 'You are going to the beach.'
\begin{tabular}{llllll} 
Ne= \(\mathrm{n}-\mathrm{a}\) & \(\mathrm{n}-\mathrm{O}\) & ne & báng & ne & ti. \\
1PL=1PL-walk & 1PL-seawards & 1PL.go & beach & 1PL.be & 1PL.do \\
'We are going to the beach.' & & & &
\end{tabular}
\[
\begin{align*}
& \text { E=ha o re báng i li. }  \tag{125}\\
& \text { 2PL=walk seawards go beach be do } \\
& \text { 'You are (all) going to the beach.' }
\end{align*}
\]

Even with the 2 SG or 1PL parts of the paradigm, which have overt prefixal agreement, a clause will be ungrammatical unless it has a clitic to instantiate a pronominal feature:
(123)' * ma mo me báng me pi
(124)' * na no ne báng ne ti

This shows that the prefixal agreement is obligatory, yet carries no pronominal information on its own. It is worth noting in passing that even in the restricted phonological circumstances in which a clitic may be lost (see 7.2.1.1), the prefixal agreement remains. This can be seen in sentences such as the following, in which the clitic is absent, but the prefixal agreement on any verb cannot be omitted. The first sentence shows all elements present:
\begin{tabular}{lllllll} 
Amanè & ne= \(n\)-a & \(n-0\) & ne & báng & ne & ti. \\
1DU.IN & 1PL=1PL-walk & 1PL-seawards & 1PL.go & beach & 1PL.be & 1PL.do \\
'You and I are going to the beach.' & & & &
\end{tabular}

The proclitic may be omitted, as in the following variant of the sentence, which shows just the pronoun and five inflected verbs.
(126)' a. Amanè na no ne báng ne ti.

Despite this, it is ungrammatical for any of the verbs to appear without overt prefixal agreement. The following ungrammatical examples show that none of the verbs that are eligible for prefixation may appear without this agreement.
(126)' b. * amanè ha no ne báng ne ti
c. * amanè na o ne báng ne ti
d. * amanè na no re báng ne ti
e. * amanè na no ne báng e ti
f. * amanè na no ne báng ne li
g. * amanè ha o re báng e li, etc.

Even with identical and adjacent syllables, reduction is not possible except for the clitic:
(127) Amanè ne=ne. 1DU.IN 1PL=1PL.go
'You and I went.'
(127)' Amanè ne.
(127)" * amanè, * ama ne

This shows us that the reduction that applies between the 1DU.IN pronoun and its immediately adjacent proclitic is nor recursive.

\subsection*{7.3.3 The status of agreement by stem suppletion}

As mentioned in 7.2.4, only a few verbs show stem suppletion, and when they do the choice of stem depends on the single argument of an monovalent verb, or the object of a bivalent verb. In neither case is the suppletive use of a verb stem grounds for omitting the relevant free pronoun, proclitic, or prefix, as can be seen in the following examples.

In (128) the verb root láng has been used because the object is feminine. Nonetheless, the feminine object must be overtly present in the clause.
```

(128) $\mathrm{Mè}$ pe mè=p-áng-páng.
2SG 3SG.F 2SG=2SG-hit.F-RED
'You will hit her.'
(128)' * mè mè= páng páng, * mè páng páng, * páng páng

```

Similarly, when an monovalent predicate has a suppletive stem, the presence of this suppletive stem does not allow for the independent pronoun or clitic to be omitted. To take an extreme example, the predicate 'fall' consists of the inflecting and number-suppletive verb 'go', and a number-suppletive adjunct nominal. Despite the multiple marking of person, number and gender features on the verb+adjunct nominal complex, this marking does not license the omission of the clitic. The following three sentences show the obligatory use of clitics (and, for third person, a free pronoun) with suppletive forms of 'fall'.
(129) Nì=kú re.

1SG=fall go
'I fell over.'
(130) Pe pe=pí te.

3SG.F 3SG.F=F.fall 3SG.F.go
'She fell over.'
(131)
\(\mathrm{E}=\mathrm{I} \quad\) re.
2PL=PL.fall go
'You (all) fell over.'

Even though number, or gender, is explicitly marked on the form of the adjunct nominal in these clauses, this is not sufficient condition to allow either the free pronoun or the clitic to be omitted. Various ungrammatical variations of (130) and (131) are shown below.
```

(130)' * pe=pí te, * pe pí te, * pe=pí re
(131)' *íre

```

These examples show that stem suppletion does not count as strong agreement where it is found. A very different pattern emerges with vowel alternations, as the following sections reveal.

\subsection*{7.3.4 The status of agreement by vowel alternations based on the subject}

In 9.2.3 we saw that the gender or plurality of a subject can affect the quality of the vowel in several predicates, with feminine being marked by a rounding and backing of a vowel, and plurality marked by a fronting and raising of the vowel. As with prefixal agreement, however, vowel alternation does not apply to all verbs. The analogy for the status of this agreement holds: the presence of agreement by vowel alternation is not pronominal, just as with prefixal agreement. Since vowel alternation is not found in the main with first and second persons, we shall only examine sentences with third persons.

The following sentences show that agreement by vowel alternation does not represent a pronominal feature on the verb. In addition to the vowel alternation, the normal clitic and free pronoun are still required.
(132) Pe nì pe=fu.

3SG.F 1SG 3SG.F=see.F
'She saw me.'
(132)' * nì pe=fu, * pe nì fu, * nì fu, * pe=fu
(This last possibility, \(\mathrm{Pe}=\mathrm{fu}\), is grammatical with another meaning, 'She saw her.' See the following section)

When plural number is marked on the verb stem by vowel alternations, an identical pattern emerges: the marking is insufficient to allow for the free pronoun to be omitted, and so the only grammatical option for coding the sentence is for the free pronoun, as well as the clitic and the vowel alternation on the verb, to be present.
```

(133) Te nì te=fi.
3PL 1SG 3PL=see.PL
'She saw me.'
(133)' * nì te=fi, * te nì fi, * nì fi.

```

We can only conclude that vowel alternations, like prefixes and their induced initial consonant alternations, are not pronominal when marking features of the subject. these same morphophonemic alternations are used to show agreement for the object, on the other hand, their status can be pronominal.

\subsection*{7.3.5 The status of agreement by vowel alternations based on the object}

Vowel alternations can be used to mark [feminine] or [nonsingular] features of the object, in addition to their use in marking these features for the subject of the verb. If this is the case, the status of the alternations is quite different.

A full sentence showing a vowel alternation for object is given in (135). Alternatives, in (134)', show various grammatical reductions in the amount of material in the sentence.
\[
\begin{array}{lll}
\mathrm{Nì} & \text { pe } & \text { nì=fu. } \\
\text { 1SG } 3 \text { SG.F } & 1 \mathrm{SG}=\text { see. } \\
\text { ‘I saw her.' }
\end{array}
\]

From these examples we can see that, unlike the case of verbs showing alternations in the quality of the vowel based on the features of their subject, which does not have pronominal status, when the alternation is based on the features of the object of the verb, pronominal status may be (not obligatorily) found in the verb. A sentence such as Nì fu 'I saw [feminine].', does not have a free pronoun representing the object. The vowel \(u\) can only be found in this verb if there is a feature [feminine] coded on it, from either the subject or the object, and since first and second persons do not control gender agreement, the only other controller must be the nonovert object, which is adequately represented by just that vowel alternation.

With plurals, a similar pattern emerges. In the following sentence the subject is third person, and so the free pronoun is obligatory, \({ }^{46}\) but the status of the vowel alternation on the verb stem is identical.
(135) Ke ne \(k e=f e\).

3SG.NF 1PL 3SG.NF=see.PL.ANIM. \(P\)
'He saw us.'
(135)' Ke ke=fe.

3SG.NF 3SG.NF=see.PL.ANIM.P
'He saw [plural].'
(= 'He saw us/you lot/them.')
When both the subject and the object of the verb would show the same vowel alternations, the marking on the verb codes the object (see 7.2.3), which may then be represented solely by the verbal agreement marking; it is grammatical for the free pronoun to be omitted from the clause:
```

Pe=fu.
3SG.NF=see.F
'She saw [feminine].'

```

This has the most unmarked reading 'She saw her.', and might be related to the more 'saturated' sentence Pe pe=fu. It shows identical syllable reduction applying to reduce [pepcfu] to [pefu] ~ [pefu], as seen in (136). This sentence is not a grammatical way of expressing, for instance, 'She saw him.', which could only be grammatically expressed as Ke pe=fu, with a full pronoun for the object, which is not recoverable from any context. With vowel alternations

\footnotetext{
46 Though phonological reduction may result in the reduction of one of the [ke] syllables.
}
involving a plural object, the same pattern can be observed. In (137) the vowel change alone is sufficient to encoded the plural object in the clause.
(137) \(\mathrm{Ni}=\mathrm{fe}\) ka.

1SG=see.PL.P NEG
'I didn't see (you plural, them).'
It is clear that, even though the same grammatical mechanism is involved in marking features of the object on the verb by vowel alternation as is used to mark subject features, the pronominal status of the two is different. This might reflect the origin of the vowel alternations: a likely source of these vowel changes is that they were originally used only to mark object features on the verb. They do still show an obvious grammaticalisation path pronoun > clitic > affix \(>\) vowel modification, but at an older level than proto-Skou. Productive object markers can be found in more distant relatives: Barupu has the 3SG.F.P suffix -u, Womo has an identical suffix, and Krisa, even more distantly related, shows 3SG.F.DAT -ii, 3SG.F.P -wi, which appears related to the Skou rounding and backing process that marks feminine subject. It is most likely that the Skou vowel alternations reflect a proto-Macro Skou set of productive object suffixes, which are variously preserved (in I'saka, Piore River and Serra Hills languages) or lost (in the smaller Skou family) in the daughters of proto-Macro Skou.

\subsection*{7.3.6 Summary of the pronominal status of verbal agreement markers}

We have seen that there are a variety of means by which verbs show agreement with the subject or the object of the clause, and that these different agreement strategies have differ in terms of the pronominal status that they exhibit. These different results are summarised in table 122xx, in which weak agreement, which is never pronominal, is indicated with a ' - ' in the appropriate cell, strong agreement is shown with a ' \(\pm\) ', and hyperstrong agreement is not shown, as it does not occur in Skou. The notation '.' indicates that that particular form of agreement is not found for the person indicated in the leftmost column.

Table 122. Pronominal status of agreement in Skou
\begin{tabular}{l|ccc|c|c}
\hline \hline Person & \multicolumn{3}{|c|}{ Subject } & \multicolumn{2}{c}{ Object } \\
\hline & Clitic & Prefix & Vowel & Vowel & Suppletion \\
1,2 & \(\pm\) & - & \(\cdot\) & \(\cdot\) & \(\cdot\) \\
3SG.NF & - & - & \(\cdot\) & \(\cdot\) & \(\cdot\) \\
3SG.F & - & - & - & \(\pm\) & - \\
3PL & - & - & - & \(\pm\) & - \\
\hline \hline
\end{tabular}

The asymmetry between the functions of vowel alternation marking subject or vowel alternation marking object is particularly striking, since it is exactly the same piece of morphology that is used in both instances.

\subsection*{7.4 A model of idiosyncrasy in the verbal lexicon}

The preceding sections of this chapter have shown that there are a lot of complicating factors behind the agreement paradigms that is realised on different verbal roots in Skou. The randomness is not, however, entirely without patterns. We have seen that some cells in the
inflectional paradigm are less likely than others to take distinct inflected forms, and at the same time there is a dependency relationship between inflection in different cells of the table, such that, for instance, inflection of the verb for a distinct 3SG.F form implies the existence of a distinct 2 SG form, and not the other way around. Clearly, then the acquisition of complexity in a verbal paradigm follows a set of ordering principles. Nevertheless, the degree to which those ordering principles are manifested in the paradigm of any one verb is not predictable.

The number of non-predictable patterns, compared to both the number of verbs in the inflecting system and to the total number of verb stems, bears a strong resemblance to the behaviour of Germanic strong verbs in the Germanic verbal systems. We note that there are approximately 144 verb roots in Skou, a number that is not large, even given the limited lexical materials available for the language. It does, in fact, compare equably with the between 100 and 200 strong verbs in Germanic languages. This suggests that perhaps dealing with the Skou verbal lexicon in the same way that we deal with the strong verbs in languages like the Germanic ones might in fact be a better way to analyse the data. The regular patterns that can be derived from the inflectional paradigms might well represent the vestiges of an earlier, more regular, system (to judge from the verbal morphology found in the related languages further east), and now only linguists can determine the connections between what might be simply learned paradigms, and not rule-produced.

\subsection*{7.5 Excursion: the obligatoriness of arguments}

We have discussed the degree to which agreement marking on the verb has the status of a syntactic argument of the verb, and the extent to which agreement marking alone can satisfy the subcategorisation requirements of a verb. It is worthwhile to take an excursion and examine the degree to which a verb's subcategorisation requirements must be met; in other words, how obligatory are the arguments of a verb?

For a monovalent verb, the single core argument is obligatory in the clause (though see the discussion of the status of pronominal agreement in 7.3). This is true for agentive, dynamic, and volitional verbs, such as ha tà 'run', and others listed in 5.4.1.1, and also for nonagentive verbs such as those described in 5.4.1.2.

Some languages allow, or even require, certain meteorological verbs to appear without any overt subject. Some examples are the following: \({ }^{47}\)
\begin{tabular}{lll} 
Indonesian & Tagalog & Tukang Besi \\
a. Hujan. & [Um]u-ulan. & No-wande. \\
rain \\
'It's raining.' & RED-rain.AV & 3R-rain \\
\begin{tabular}{lll} 
b. Angin (tiup). & H[um]a-hangin. & No-kawea. \\
\begin{tabular}{l} 
wind blow \\
'The wind is blowing.'
\end{tabular} & RED-wind.AV & 3R-wind
\end{tabular} \\
& &
\end{tabular}

\footnotetext{
47 Indonesian does, colloquially, allow (Hari) hujan '(The day) is raining.', but the 'subject' in this case has no referential status and no special (subject-like) grammatical privileges (such as the ability to head a relative clause, expected for subject (amongst other functions), which is ungrammatical for this example: * hari yang hujan 'the days on which it rained').
}

In Skou this type of construction is not an option; translations of the sentences in (138) must include a nominal representing the subject, and a verb.
\(\begin{array}{lll}\text { a. } & \begin{array}{l}\text { Fu ma } \\ \text { rain fall } \\ \text { 'It's raining.' }\end{array} & \begin{array}{l}\text { 3SG.F.be } \\ \text { tue. } \\ \text { 3SG.F.do }\end{array} \\ \end{array}\)
b. Féng ke=lúe i li. wind 3SG.NF=blow be do 'The wind is blowing.'
In (139) the verbs used are both highly specific: ma can only be used with fu as its subject (the more general predicate for falling is ku re), and similarly lúe only applies to the wind blowing, not to, for instance, a person blowing on a fire (pong). There is a lot of redundancy here, but the principle behind it is that the subcategorisation frame for a monovalent verb requires an argument, and that argument must be overt. We have already seen that clitic agreement markers, if representing first or second persons, are sufficient to fill these subcategorisation needs, but in other cases an overt free nominal or pronoun must be used.

With bivalent verbs, we find a continuation of this pattern. The subcategorisation frame of the verb calls for two arguments, and they must both be represented in the clause. Because of the variable status given to agreement marking on the verb, this means that it is possible for some clauses to fully satisfy their subcategorisation requirements with only the inflected verb, as in (140).
(140) \(\mathrm{Ne}=\mathrm{fu}\).

1PL=see. F
'We saw her.'
Since most verbs do not show agreement by means of vowel alternations, and since vowel alternations are the only means available for showing agreement with the object on the verb, we find that in general, and divorced from discourse, a free NP representing the object must be present. Compare, for instance, the following sentences, two grammatical, and the last ungrammatical.

Te=angku móe te=t-ang.
3PL=child fish 3PL=3PL-eat
'The children ate fish.'
Te=angku ya te=t-ang.
3PL=child thing 3PL=3PL-eat
'The children ate (something).'
(143) * te angku te tang
'The children ate.'
Here the verb does not provide any means of indexing the object (by, for instance, vowel alternation or suppletive verb form), and so this argument is unrepresented on the predicate. The only way it can be expressed is by means of a free nominal, or pronominal. When it is not so realised, as in (143), the sentence is judged ungrammatical. Here, as with the monovalent verbs, we can see that when an argument is called for by the subcategorisation frame, then it must be provided. If the clause does not refer to a specific nominal, and only a generic interpretation is intended, then at the least the lexically 'empty' form ya 'thing' must be used to satisfy the subcategorisation requirements.

This principle of obligatory representation of subcategorised-for arguments extends further than a requirement on subjects and objects being present. There are some monovalent predicares that require a nominal other than the subject to be present. Examine the following sentence, in which the verb appears with a preverbal subject and a postverbal locative oblique.
\begin{tabular}{lll}
\(\mathrm{Pe}=\) ueme=wò=fa=ing a & \(\mathrm{pe}=\mathrm{w}-\mathrm{a}\) & lòengma. \\
3SG. \(\mathrm{F}=\) woman=EMPH=just=the & 3SG.F=3SG.F-walk & road \\
'The woman walked on the road on her own.' &
\end{tabular}

If there is no location or goal mentioned, then an adjunct nominal must appear with this verb. A clause with just the subject and the verb is not grammatical.
\(\mathrm{Pe}=\) ueme=wò=fa=ing a lòeng \(\mathrm{pe}=\mathrm{w}-\mathrm{a}\).
3SG.F=woman=EMPH=just=the 'road’ 3SG.F=3SG.F-walk
'The woman walked on the road on her own.'
(146) * pe ueme ing a pe wa

The other notes that need to be made concerning adjunct nominals relate to their function as parts of predicates, rather than arguments. They are found with various types of predicates (see chapter 14), both bivalent and monovalent, and in most cases serve to semantically specify the predicate, since the verb used is often (but not always) semantically 'bleached'. An example of a verb requiring an adjunct nominal is hí 'wash', which is only grammatical if it appears with a nominal specifying the mode of the washing, typically pa 'water', but also possible with other watery locations.

Pa nì=hí-hí li.
water \(1 \mathrm{SG}=\) =wash-RED do
'I want to wash.'
(148) Tí nì=hí-hí li. sea 1SG=wash-RED do 'I want to wash in the sea.'
\[
(149) * \text { nì=hí-hí li }
\]

Another relevant parameter that we need to describe this construction is the fact that an adjunct nominal does not satisfy the conditions for the realisation of a object sufficiently to allow a subcategorised-for argument to be omitted (this is especially interesting given the absence of any lexically trivalent verbs in the language). In the following sentences we can see that the subject of instruction must be mentioned, even though there is another nominal, na 'teachings', in the clause which might (incorrectly) be thought to satisfy this requirement.


In passing we should note that, in contrast to the obligatoriness of the adjunct nominal and the requirement that core arguments are realised in the clause, it is acceptable for a bivalent clause to lack an oblique argument, even if it is one that has been subcategorised for by the
verb. In the following sentence na lùng 'teach' subcategorises for a postverbal, oblique, instructee, but it may be omitted.
(153) Ne te M áwo pílang tè te na ne rùng ne ti.
'We're teaching the Skou language.'
Similarly, verbs of placing, existing, living, posture verbs, and others may all appear without a specified oblique, unlike their equivalents in English. Contrast the grammaticality of the following sentences with their English translations. In both cases the Skou sentences are perfectly well-formed and natural.
\(\mathrm{Pe}=\) mong tue \(\quad\) wa=ing a.
3SG.F=F.sit 3SG.F.do
cave=the
'She lived in that cave.'
\(\mathrm{Pe}=\) mong tue.
3SG.F=F.sit 3SG.F.do
'? She lived.'
Finally, the requirement for the obligatory representation of arguments can all be suspended under the conditions of discourse salience. When a nominal is clearly retrievable from its context, and has been unambiguously established as topical, then it may be omitted. The following, somewhat lengthy, extract demonstrates this point. The penultimate clause appears to be a direct counterexample to the indicated ungrammaticality of (143) and (151). As we can see from the preceding clauses, however, the nominal hòe has been unambiguously established as the topic.


The mention of pa 'water' in the second and third clauses does not disrupt the topicality of hòe; pa is not rated as topical enough to be omitted in the clause pa lí lí pa, and must be overtly mentioned. But in the fourth clause from the start, highlighted, the subject is omitted. In the third last clause, also highlighted, hòe is similarly omitted from its position as object. Here the dominance of any scales of topicality by the referent hòe means that it can be omitted. Nonetheless, a clause such as te angku te tang will unhesitatingly be judged as incomplete and ungrammatical by speakers, when it is presented to them without this establishing context. It is also interesting to note that the speaker immediately corrects/elaborates the clause with hòe te tang 'they ate sago', with an overt object, showing the strong preference for explicitly filled
argument positions. This occurs even under these conditions of established topicality, following this omission of a subcategorised-for argument.

In sum, Skou is a language with very strict restrictions on the morphological realisation of valency and subcategorisation patterns. When a verb is lexically specified as taking two arguments, then two arguments are obligatory.Under the conditions summarised at the end of 7.3.6, those arguments may be realised simply by verbal agreement, but in most cases overt free NPs must be used.

\subsection*{7.6 Questioned subjects and verbal agreement}

In an interrogative sentence questioning a human subjects, the regular pronominal clitics on the verb can be replaced by the animate interrogative bá 'who':
\[
\begin{align*}
& \text { H òe-nì=ne } \quad \text { bá=k-ang? }  \tag{157}\\
& \text { sago-1SG.GEN=1SG. DAT who=3SG.NF-eat } \\
& \text { 'Who ate my sago?' }
\end{align*}
\]

This sentence serves as an alternative to the following, in which the interrogative appears in the normal position for an argument of its function, and the agreement on the verb is simply with the unmarked third person clitic:
\[
\begin{array}{ll}
\text { Bá hòe-nì=ne } & \text { ke=k-ang? }  \tag{158}\\
\text { who sago-1SG.GEN=1SG.DAT } & \text { 3SG.NF=3SG.NF-eat } \\
\text { 'Who ate my sago?' }
\end{array}
\]

The sentence in (157) must be parsed as a two-word clause of the form \(N P_{P} V\), rather than a three word clause with a focussed nominal out of its normal clause-initial position: \({ }^{*} \mathrm{NP}_{\mathrm{P}} \mathrm{NP}_{\mathrm{FOC}} \mathrm{V}\). The evidence for this position can be found in the following sentence that attempts this latter strategy, but preserves the normal proclitic agreement on the verb. We have already seen, in the alternative phrasing immediately above, that subject agreement is allowed when the subject is in the normal sentential position, yet in this case it is not grammatical.
\[
\begin{array}{cll}
(159) & \text { * hòe-nì=ne } & \text { bá } \\
\text { sago-1SG.GEN=1SG.DAT who } & \text { 3SG. } \mathrm{NF}=3 \text { SG. NF-eat }
\end{array}
\]

From this test we must concluded that the appearance of bá in sentences such as (157) represents a real interrogative agreement marker on the verb. It is beyond the scope of the present work todefinitively determine whether this is a recent innovation, or represents an ancient feature of the language, but the fact that the related and non-contiguous language I'saka (Donohue and San Roque 2004) also has special interrogative agreement prefixes for human subjects argues that this might be an old, relic feature of the Macro-Skou languages. The fact that we also find relic classifiers using the morpheme bà= with adjectival predicates adds further support to this hypothesis.

\subsection*{7.7 Person agreement in adjectives}

Although it is not obligatory, or normal, for an adjective to appear with agreement markers, words of this word class can show agreement when they are used in a predicative function. The agreement is marked by use of the same pronominal agreeement clitics that are seen on verbs.

Displaying overt agreement is not, however, a feature of all adjectival predication, as it is in verbal predication. Compare the following two sentences with adjectival predicates: in the first, there is not a marker of agreement on the adjective, whereas in the second we find a feminine agreement clitic, agreeing with hòe ing a, which is feminine. Additionally, there is an aspectual distinction.
```

(160) Hòe=ing a langpi.
sago=the delicious

```
'The sago is delicious.'

'She stirs it with a sago stirrer, and that sago, it becomes really delicious.'
The difference between these two predicates is based on the scale of inchoativity: in the first, the predicate describes an ongoing, and perhaps even repeated and habitual, state. In the second sentence, on the other hand, langpi refers to the changing state of the sago, which becomes delicious. It is a consistent fact that inchoative adjectives, while not formally marked or derived in any way from their bases, take pronominal agreement when predicative, while non-inchoative adjectives do not. This accords with cross-linguistic tendencies for inchoative properties to be more likely to be coded in the same manner as verbal predicates, if there is a distinction between verbal and other predicative categories.

\subsection*{7.8 Verb collocations and multiple consonantal agreement}

The grammatical patterns associated with verb sequences in the forms of serialisation and other restrictions are discussed in more detail elsewhere, but in this section the implications for agreement morphology of a sequence of two or more verbs, all of which are used as part of the description of a single event.

The first characteristic that we shall describe for verbal collocations involves the omission of the proclitic on a verb other than the initial one in the series. In many instances either both verbs in series may appear with proclitic agreement markers, or just one may. The next two examples show this.

Both verbs with clitics (possible serial verb construction, possible biclausal)
Lòeng pe=w-á pe=te pa.
road 3SG.F=3SG.F-walk 3SG.F=3SG.F.go water
'She walked to the river.'
Only first verb marked by clitic (serial verb construction)
Lòeng pe=w-á te pa.
road 3SG.F=3SG.F-walk 3SG.F.go water
'She walked to the river.'
(other instances in which proclitic agreement may be omitted are described in 7.2.1.1)
Another variable factor in a description of the appearance of agreement in collocations is whether the features coded in the agreement are shared across the two (or potentially more) verbs in the construction. In the following two sentences, both encoding the same semantic meaning, we can see that in (165) the feature [plural] referring to the number of the object (the
plural object, fish), is coded in the choice of the verb of getting (the selection of lóe rather than wé) and the vowel alternation in the verb of putting down (fe rather than fu). In (165) the plural feature is marked only on the verb of getting, and not on the verb of placing, which shows inflection for singular (and feminine, since móe is a feminine noun - feminine gender must always be marked, if it is present on nonsentient nouns). Clearly in (165) the two verbs disagree in terms of the pronominal features that they index.

Number agreement shared
Móe te-r-é fe.
fish 3PL=3PL-get.PL put.down.PL
'They put the fish \({ }_{\text {FEM, PL }}\) down.'
Number agreement not shared
Móe te-r-é fu.
fish 3PL=3PL-get.PL put.down.F
'They put the fish \({ }_{\text {FEM, PL }}\) down.'
The variation between forms such as (164) and (165), which is apparently random though with a statistical preference towards the fully agreeing verb forms seen in (164), is tolerated. It is, nonetheless, not acceptable for the first verb in the sequence to do anything other than faithfully code the features as best it can. Any variation of the sentence (164) above involving a verb of getting that does not code the feature [plural] for the object, such as (166) and (167), is not grammatical, regardless of the pronominal features found in the second verb. In (167) we can see that even if the first verb shows agreement for a different pronominal feature of the object, here [feminine], the sentence is regarded as ungrammatical, because it is the less-preferred feature (see 7.2.3). (Note that the PL annotation for kí indicates vowel alternations for plural subject, and does not show agreement with the object.)

Plural agreement absent on first verb: ungrammatical
(166) * móe te-kí (fe /fu /fue)
fish 3PL=PL.get put.down.PL / put.down.F /put.down
'They put the fish \({ }_{\text {FEM, PL }}\) down.'
\((167)\) * móe te-wé (fe /fu /fue)
fish 3PL=get.F put.down.PL / put.down.F / put.down
'They put the fish \({ }_{\text {FEM, PL }}\) down.'
Similarly, the allowed variation extends in the second verb to a choice of which features of the object may be coded: sentence (165) shows the feminine gender, rather than plural number, being marked in the verb (with 'put down' it is marked by vowel alternation, not by a suppletive selection of verb stem), so there is still some degree of agreement being marked, even if it is not the 'preferred' agreement pattern. What we do not observe is a simple stripping away of features, with, for instance, a maximally underspecified verb root appearing, not marking any number or gender features at all, such as in (168). Here the first verb selected is the 3PL form of the plural object verb lóe, but the second verb, fue, marks neither feminine nor plural agreement. The resulting clause is ungrammatical.

Pronominal agreement absent on first verb
(168) * móe te-r-í fue
fish 3 PL=3pl-get.PL put.down
'They put the fish \({ }_{[F E M, ~ P L]}\) down.'

Rather than irregularly seeing bare, or reduced, forms of verbs, we observe alternatives in coding different features: the choice of forms for the second verbs is either fe, which marks a plural value for the object, or fu, marking feminine, but not simply the bare form fue. Logically this would mean that in a collocation in which the second verb in the series does not have multiple alternative forms which would permit alternative codings (either through vowel alternation or suppletive forms of the verbs), variation in the coding of the collocation as a whole would not be possible. That is, if there is only one possible feature that can be coded on the verb (see 7.2.3.1, or appendix 2 , for examples of verbs with defective paradigms in vowel alternation), then the variation will not be found. This prediction is borne out by the data. In (169) the object is singular, as shown by the (optional) numeral in the NP, and the choice of verb of getting (recall that this verb has suppletive forms for different features of the object; in (164) and (165) the plural object form, lóe, is used (with appropriate inflections); in (169) the feminine object form, wé, is used, the same form that was seen in (167). The second verb, fue 'put down', also shows agreement with the feature [feminine] in the use of a high back vowel, fu.
(169) Móe (áling) te-wé fu.
fish one 3 PL=get.F put.down.F
'They put the fish \({ }_{\text {FEM, SG }}\) down.'
There are no grammatical alternatives to the coding strategy shown in (169), in which feminine gender is marked on both verbs. We have seen that the first verb does not allow a disagreement option. The only coding choices that we have are for plural object being marked on the second verb, or for no object agreement to be registered on the second verb. Since the object is not plural, the first option is not grammatical, as in (170). We have already seen that a plural object may not be used with a second verb that shows no agreement at all, as in (168); the same holds for a feminine object, as shown in (171).
\begin{tabular}{cll}
\((170)\) * móe & (áling ) te-wé fe & fish \\
one & 3PL=get.F put.down.PL
\end{tabular}

Similarly, when the object is one that is eligible for agreement on either the feature [feminine] or [plural], but not both, then there can be no alternations, since alternations with non-agreeing forms are not allowed. In (164) and (165), where the object is both [feminine] and [plural], we can see that variation in terms of which feature is indexed is allowed, while in (169), in which the feature [feminine] is present, but [plural] is not, there is not such variation. In (172) the object is plural, but not feminine: the only pronominal feature that a verb can agree with is the feature [plural]. Consequently there are no acceptable variants in the coding of this sentence, since there is no feature [feminine] for the second verb to show agreement with, and non-agreement, in the presence of features that call for agreement and a verb that allows such agreement, is not grammatical, as shown in (173) and (174).

Apále te-r-é fe.
black.crab(sp.) 3PL=3PL-get.PL put.down.PL
'They put the fish \({ }_{\text {FEM, PL }}\) down.'
\(\begin{array}{lll}\text { * apále } & \text { te-r-é } & \text { fu. } \\ \text { black.crab(sp.) } & \text { 3PL=3PL-get.PL } & \text { put.down.F }\end{array}\)
\begin{tabular}{lll} 
* apále & te-r-é & fue. \\
black.crab(sp.) & 3PL=3PL-get.PL & put.down
\end{tabular}

If we examine those verbs with 'defective' paradigms for vowel alternation (see 7.2.3.1), we find that where there is any gap in the paradigm of vowel alternations, it is the singular feminine that is not realised as a distinct unit, not the plural (which is realised). For example, on the basis of comparison with verbs such as lóe 'shave', we might expect a set of vowel alternations for moe 'return' that included a unique form for 3 SG.F; this is not the case, as can be seen in (175).

Attested vowel alternations for lóe 'shave'
\begin{tabular}{lll} 
Root: & lóe & \\
3PL: & rí & \((<t-l i ́)\) \\
3SG.F: & rúe & \((<\mathrm{C}\)-lúe \()\)
\end{tabular}
\begin{tabular}{ll} 
Paradigm for moe 'return' & \(*\) \\
moe & Coe \\
me & Coe \\
\(*\) mu,\(*\) mo \(; \sqrt{ }\) moe & Cue
\end{tabular}

The fact that the 3SG.F form for 'return' is in fact moe, identical with the root and showing no vowel alternation at all, shows that vowel alternations do not always apply where they might apply. In a sense, then, any agreement with object, marked by either vowel alternations or marked by verb suppletion, is firstly a marker of the feature [plural]. Verbs only show agreement with feminine objects if they also show agreement with the plural objects, but not the other way around: as the last column of (175) shows, there are no verbs for which a separate feminine form exists, but which have no distinct plural form. Agreement with the plural object of a serial verb construction that is also feminine by marking [plural] on one verb and [feminine] on the other is thus not losing any specificity: the predominant feature, [plural], takes precedence, as indicated by its obligatorily appearing on the first verb. The second verb can mark the feature [feminine], and by the fact that the verb appears in a non-basic form it is still overtly signalling that the [plural] was a coding option, for that verb. The more general feature [plural] is assumed, given marking for any feature of the object. On the other hand marking a plural feature where feminine was intended does not carry any implication that marking for feminine is even possible, and so is a distinct loss of morphological information: not just a loss of the pronominal features present in the clause, but also a loss of information about the morphological possibilities available to that lexeme. It is thus possible for [feminine] to appear as the feature encoded on the second verb in a sequence, since that would not give false information about the inflectional possibilities of the verb, and the previous verb, inflected for [plural], guarantees that all the pronominal information is preserved, as well as making obvious the morphological possibilities that the verb possesses. This kind of disagreement is similar to the use of feminine, rather than plural, forms of the aspect-marking auxiliaries (7.9.3), but differs from the disagreement found with the same verb forms when the disagreement is for the features associated with the subject (12.2, 12.3.2), where Ø-agreement is possible.

As seen in the examples above, 'get' is a verbal root that is particularly frequently found in combination with other verbs, or particles. In many cases the verb that collocates with 'get' is itself inflected; its status is not necessarily that of a main verb, however, since it is often only found in combination with the 'get' verb, and in some cases it is not grammatical for the second verb to take proclitic agreement. For these collocations it is then reasonable, synchronically, to speak of an incipient 'complex verb' in which there are two (or more) positions for agreement, on the two verbs, one of which is restricted to appearing with the other verb, and so is not entirely independent. This is modelled in (176); the stage II position is that occupied by the
'get'-collocations, but when we include other multiple-verb constructions in Skou, all three stages are attested.
(176) Stage I: proclitic=[v1 prefix-get] proclitic=[v2 prefix-verb]

Stage II: proclitic=[v1 prefix-get] [v2 prefix-verb]
Stage III: proclitic=[ prefix-ver \(b_{1}\)-infix-verb \(b_{2}\) ]
This structure can be shown in more detail by examining the inflection of the verbal collocation for 'give', shown in (169) (in each case the columns show singular and plural, respectively, and the rows mark first person, second person, third person unmarked, and third person feminine (singular) at the end). Examining this paradigm it is clear that both verbs inflect. Nonetheless, nothing may intrude between the two elements, and it is likely that, were it not for the obvious productivity of the 'get' verbs in other contexts, the verbs would be treated simply as complex verbs with multiple exponence for subject; the 2 SG form for the verbal collocation with a non-feminine, non-plural object would then be analysed simply as [b]é[p]eng, with two separate loci for the agreement morphology, as shown.
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multirow{5}{*}{(177)} & \multicolumn{4}{|l|}{Inflection and suppletion for 'give':} & \multicolumn{2}{|l|}{plural} \\
\hline & kéleng & ké reng & wéleng & wé reng & lóe leng & róe reng \\
\hline & bé peng & kéleng & pé peng & wé leng & lóe peng & lóe leng \\
\hline & kéleng & kéring & wéleng & wé ring & lóe leng & ríring \\
\hline & wé rung & & wér rung & & róe rung & \\
\hline
\end{tabular}

This model of incipient complex verb formation is also useful for describing some of the other collocations found in the language. The collocation for 'count', for instance, consists of two reguarly inflecting h -initial verbs. Unlike the collocations for 'give' above, however, neither of the elements in 'count' are found in any other verbal units. This means that there is, synchronically, no reason (other than the obvious regularity of the changes) for a speaker to think that there might be anything other than a complex verb with infixation.

\section*{Inflection of 'count':}
\begin{tabular}{ll} 
há hi & ná ni \\
má mi & há hi \\
ká ki & yá yi \\
wá wi &
\end{tabular}

Examples of verbal collocations in which the two separate elements that take prefixal inflection do not take the same forms of inflection, and which are nevertheless not semantically separable, are shown in (179) (for both the 3SG.F and the 3PL cells in 'pull' there are two possible forms; this variation applies to different speakers, and also to the same speaker, some of whom vary and acknowledge the variation in their speech).

Inflection of ha lú 'pull', lo hí 'hit with hand' and lé lúe 'annoy'
\begin{tabular}{llllll} 
ha lú & na rú & lo hí & ro ní & lélúe & té rúe \\
ma pú & ha lú & po mí & lo hí & pé púe & lélúe \\
ka lú & ta rú / tu rú & lo kí & ro jí & lélúe & té rí \\
wa rú / pu rú & wo wí & & tóe rúe
\end{tabular}

An extreme example of this sort of verbal collocation, with inflection for subject on each of the two putative verbs that make up the collocation, can be seen in the expression 'raise, nurture', which inflects as shown in (180).

Inflection of 'raise, nurture':
(180)
```

a wa li e na wa ti ne
ma wa pi me a walie
ka wali i tuwati e
pu wa tue e

```

In this verb we can see inflection on three of the four parts of the collocation; the first element appears to be at least diachronically derived from ka 'fetch, carry' (though in this expression the 1 SG k - that is found with ka 'carry' has not been observed), and speakers give this as the etymology of this part of the verb. The second last syllable is clearly the generic verb li 'do, make', and it inflects exactly as we would expect that verb to inflect. The final syllable is derived from i 'be (at)', leaving the uninflecting wa as the only element that is semantically specific to 'raise, nurture'. If this verb is analysed not as four composite parts, but as one single unit, not decomposable into sub-parts, with complex internal inflection, then the description of agreement patterns becomes much more complex. Examine the following alternative presentation of the same verbal predicate (NOT seriously advocated here), with the bold showing the segments that show inflectional variation.

Alternative representation of 'raise, nurture' as a single lexical item
```

(181) awalie nawatine
mawapime awalie
$\boldsymbol{k}$ awali.i tuwatie
puwatue.e

```

Taking just the (inflectionally completely regular - see 7.2.2) 2 SG form for more detailed consideration, we would be forced to describe the inflection as involving something like the following template. The subscripts show identifiable elements in the verbal complex, and the locus of inflection (for this form at least) is shown in (182).


A major problem with this analysis would be that we have no means of predicting if a particular lexical verb will take multiple exponence for its consonantal inflection, or if it will appear with only one prefix marking subject (or, for that matter, none at all). For instance, compare the paradigm for léngho 'be amazed' with lèng 'be quiet' and leng 'give to' (which is most usually found in combination with a verb of getting, ké, wé or lóe).

Inflection of léngho 'be amazed', lèng 'be quiet', and leng 'give to'
\begin{tabular}{llllll} 
léngho & léngho & lèng & lèng & leng & reng \\
léngho & léngho & pèng & lèng & peng & leng \\
léngho & léngho & lèng & lèng & leng & ring \\
léngho & & wèng & & rung &
\end{tabular}

Even if we ignore the vowel changes found on leng 'give to', we still have to explain why there is regular prefixal inflection on leng 'give to', while the plural forms for lèng 'be quiet' lack any inflection, and léngho 'be amazed' completely lacks prefixal inflection at all (other than by proclitic). Clearly we require a degree of lexical stipulation in the ordering of the prefix system in order to explain the workings of agreement.

An example of a collocation involving ké, combined with a pair of motion verbs and a main activity verb, is shown in the textual extract presented in (184) below (taken from U epong, line 10, in appendix 4). Here the carrying is shown taking place after the acquiring of the object (in this case, the new husband acquiring a wife), and then the direction of motion of the carrying is given in the two motion verbs. It might seem surprising that the motion to another village is marked with loe 'come', and not re 'go', given that the perspective is situated in the woman's village. In the previous clause we have already seen the manner of motion, wang 'sail', combined with the appropriated inflected form of the verb re 'go'; at this point the speaker has started to shift perspective from her home village to that of her future (and, at the time of the telling of the story, deceased) husband's village. Further, given the operation of the Skou system of deixis, a village, as a centre of human settlement, is always treated as being inward and upward, regardless of any other factors influencing the coding. As part of this aspect of the language's organisation, a village can only be approached with loe, never with re, when travelling by sea. The use of moe 'return' is also clearly referring to the village as being associated with the speaker as her future home, thus becoming the deictic centre for her; the appearance of moe before loe is not iconic, but simply reflects the fact that moe is always first in a series of motion verbs (see 13.4.1).


While not pretending to be complete, the following table gives some idea of the range of meanings that are associated, in different collocations, with ké 'get'.

Table 123. Some common collocations involving ké 'get'
\begin{tabular}{|c|c|c|}
\hline Collocation & Components & Combined meaning \\
\hline ké fue & 'get' + 'put.down' & 'put down' \\
\hline ké léng & 'get' + 'give' & 'give to' \\
\hline ké ka & 'get' + 'carry' & 'take away' \\
\hline ké tu & 'get' + 'bring' & 'bring home' \\
\hline ké ka loe & 'get' + 'carry' + 'come' & 'bring' \\
\hline ké ka te & 'get' + 'carry' + 'go' & 'take' \\
\hline ké ka loe moe & 'get' + 'carry' + 'come' + 'return' & 'bring/take home' \\
\hline
\end{tabular}

Other common collocations involve general motion verbs, which combine with manner of motion verbs, or manner of motion verbs which combine with directional verbs. Some further examples are shown below.

Ke=rapue híl toe.
3SG. NF=descend go.down 3.come
'He came down.'
Ke=rapue híl toe.
3SG. NF=descend go.down 3.come
'He came down.'
More details of the syntax of serial verb constructions, including those involving 'get' verbs, can be found in chapter 12.

\subsection*{7.8.1 Excursus: multiple exponence in other languages of the M acro-Skou family}

In this section we shall examine certain features of multiple affixation in predicates found in languages related to Skou (see 1.4). Puare is a representative of the Serra Hills group, Barupu represents the Piore River languages, and Nyao is more closely related to Skou, being in the Skou family, and adjacent to Skou geographically, but representing the divergent Border group within the West Coast chain (see 1.4). Each of the languages has its own peculiarities concerning the locus of agreement and the multiple exponence of subject in different verbs, as shall be seen in the following sections.

\subsection*{7.8.1.1 Puare}

Puare generally uses prefixes to mark subject, as can be seen in the paradigm for 'cough' in table 124 xx (the table gives both phonetic information and an underlying morphological form; in the morphological form the morphological elements that serve solely to mark subject features are shown in bold). The regular prefixes \(n-m\) - and \(y\) - (the first two transparently cognate with the Skou forms described in 7.2.2; the \(y\)-, phonetically [b] are added to the root, with regular phonological consequences. \({ }^{48}\) The adjunct nominal (see Chapter 14) is unaffected by the prefixation on the root.

By contrast, lukno 'drink' shows a lack of most prefixal inflect on the first part of the verb, despite the same initial [[]] being found in both cases. This might suggest that luk is at least historically an adjunct nominal, and the verb root is the inflecting 0 , where we find apparent (regular) prefixation. Nonetheless, the 1SG does show prefixation on the start of luk as well as on the generic verb, possibly indicating that there is a process of grammaticalisation in progress. The verb 'yell' shows the same two-part split in the verb, and the same lack of evidence for the full application of prefixal agreement on the first part of the 'collocation' ( y - is found elsewhere in a complex onset with \(k\) and other consonants: yke 'He/She hit him', yla 'thatching', ypwo 'eagle (Brahminy kite)', ymu 'thoughts'). More surprisingly, in the 3SG for 'yell' no affix is found on either part of the verb: *ykaye, *ykae, *kaye.

\footnotetext{
48 In addition to the affixal patterns described here, some Puare verbs use a mixture of infixal and prefixal agreement, and a few verbs are developing a set of clitics, in addition to the affixal agreement, just as in Skou (7.2). An example is Àna yuh an=n-k-e 1SG bird 1SG=1SG.SUBJ-3SG.P-hit 'I shot a bird.' The clitic agreement is not obligatory in Puare, and is not as widespread through the lexicon and through the paradigm as it is in Skou.
}

Table 124. Sample verbal paradigms in Puare
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & \multicolumn{2}{|l|}{'cough'} & \multicolumn{2}{|l|}{'drink'} & \multicolumn{2}{|l|}{'yell'} \\
\hline 1SG & 13i if & 1si \(\mathbf{n}\)-lo & qugis & n-luk-n-o & (figane & n-ka-n-e \\
\hline 2SG & 13 mb & lsi m-lo & bumo & []-luk-m-o & kame & []-ka-m-e \\
\hline 3SG & 13ig & 1si \(\mathbf{y}\)-lo & bukg & []-luk-y-o & kas & []-ka-[]-e \\
\hline
\end{tabular}

In Puare we find that not only do some verbs show apparently complex behaviour, but that there is a great deal of unpredictability in the amount of exponence of the members of the paradigm that cannot be attributed to simply phonological factors, and so synchronically must be simply stipulated in the lexicon.

\subsection*{7.8.1.2 Barupu}

Multiple exponence is a persistently occurring feature of Barupu verbal morphology, being found in the basic inflectional paradigms of some verbs, and in all complex verbs that involve applicative derivation (Donohue 2003a).

The verb riri 'shiver', partially illustrated in table 125 xx , shows the most commonlyencountered paradigm, in which the verb is prefixed for subject, and for mood (here shown in realis with k -). The verb whose root is kwau, 'vomit', inflects with these same prefixes, but additionally with a consonantal infix, separate from the prefixal inflection. For these verbs there are two positions at which the person, number and gender values of the subject are realised.

The verb a 'eat' is most interesting. It, and others that inflect like it, use the same monoconsonantal affixes that were seen infixal in verbs like kwau, but for verbs of this class they appear prefixally (perhaps for phonological reasons - all verbs in this class have singlevowel stems). Instead of the normal full prefix, there is only a single vowel, corresponding in most cases to the first vowel of the full prefix set (an analysis that treats these verbs as inflecting with the prefixes \(e n\)-, am- and or- does not work, though this shall not be pursued here).

Table 125. Sample verbal paradigms in Barupu


In addition to the multiple exponence seen in these paradigms, applicatives in Barupu also introduce further complications. When an applicative 'suffix' is added to a fully inflected verb, the applicative morpheme additionally inflects for its own object and subject. Examine the following example, in which the fully inflected verb kenyara 'I saw him.' is suffixed with the accompanimentapplicative-i-, which itself inflects for its own object by means of the regular object suffixes (here -re for third person plural feminine), and for subject by means of the consonantal affixes that have been seen infixally and prefixally in table 125 xx (here n - for first person singular, masculine or feminine). The result is a complex verb with two separate loci for agreement in which the features of the subject are marked.

Barupu
K - zn-yara-ka-n-i-re.. R-1SG.F-3SG.M-1SG-ACCOM-3PL.F
'I \({ }_{\text {FEMALE }}\) saw him with them \({ }_{\text {FEMALE }}\) (present).'
A partial paradigm for this verb varying with other values for subject, but holding a constant 3PL.F object, are shown in table \(x x 126\).

Table 126. Verbal paradigm of an applicative verb in Barupu
\begin{tabular}{|c|c|c|}
\hline \multicolumn{3}{|c|}{'__ saw him with them \({ }_{\text {FEMALE }}{ }^{\text {a }}\)} \\
\hline 1SG.F & kenutarakenire & k-zn-yara-ka-n-i-ris \\
\hline 2SG.M & kamajarakamire & k-ama-yara-ka-m-i-ris \\
\hline 3SG.F & kojarakarire & k-o-yara-ka-r-i-res \\
\hline
\end{tabular}

It is quite clear that there are two loci for subject agreement in the applied verbs of Barupu (and the other Piore River languages), though they can arguably be thought of as single agreement markers on a double-headed complex verb. There might be phonological reasons for the different inflectional classes in Barupu, but the complex inflections on verbs such as 'vomit' and 'eat' can still only be explained in terms of multiple inflectional positions for subject.

\subsection*{7.8.1.3 Nyao}

Nyao is next to Skou geographically and part of the same smaller grouping within Macro-Skou that contains Skou (see figures 1 and 2 in 1.4). Many of the trends, both phonological and morphological, that can be found in Skou are also apparent in Nyao (and to an approximately equal extent in Nyao's linguistic siblings, Wutung and Musu). Some sample verbal paradigms are shown in table 127 xx , which illustrate the points that are being made about multiple exponence in the inflectional paradigms of verbs, and also some aspects of the phonology of this language, which is perhaps the most interesting in the close Skou family.

Table 127. Sample verbal paradigms in Nyao
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & \multicolumn{2}{|l|}{'go'} & \multicolumn{2}{|l|}{'see'} & \multicolumn{2}{|l|}{'stab'} \\
\hline 1SG & hẩ & [ ]-hä. & hiüpu & [ ]-hîi-[ ]-pu & pîko & []-pil-[]-k \\
\hline 3SG.M & ke. & k-hä & kiuk \((\mathrm{w})_{1}\) & k-hiil-k-pu & k wixo & k-pii-k-ko \\
\hline 3PL & 倩 & y-hu. & hipubu. & y-hiil-y-pu & wiko & t-pinit-ko \\
\hline
\end{tabular}

The verb \(Һ\) E' 'go' is completely unremarkable in Nyao. The verb, transparently cognate with Skou ha (though oddly with nasalisation, which is not found in other closely related languages any more than it is in Skou) shows the same basic inflectional paradigm that is found in Skou (compare with Skou: ha ka ya), and in all cases maximally one instance of agreement for subject. The regular inflection for 1 SG verbs is, like Skou, zero, and this is reflected unexceptionally in all three verbs in table 127 xx . While \(\emptyset\) is the normal inflection for 1 SG, a small number of verbs take a \(k\) - inflection. The same verbs that have been observed in Skou with \(k\) - also take the \(k\) - in Nyao ( \(\mathrm{k}-\bar{\varepsilon}\) 'eat' and \(\mathrm{k}-\mathrm{c} j\) 'carry', cognate with Skou kang and ka), and show \(\mathrm{r}-\mathrm{inflections}\) in Leitre and Dusur, the conservative \({ }^{\circ} \mathrm{T}\) retaining languages of the Skou family. This suggests that the irregularity of these verbs can be traced to proto-Skou at least.

The inflection for 3 SG. M is an initial \(k\)-, as seen transparently in the paradigm for 'go', but in 'see' not just the initial consonant of the verb, but also the consonant of the second syllable
pu shows inflection for 3SG.M, and also for 3PL. The regular morphophonological result of a k - prefixing to a p -initial verb is \(\left[\mathrm{k}^{\mathrm{w}}\right]\), as attested in \(\left[\mathrm{x} \varepsilon \mathrm{j} \mathrm{k} \mathrm{w}_{\mathrm{a}}\right]\) 'he drops' ( \(\langle\mathrm{k}-\mathrm{k} \varepsilon \mathrm{j} \mathrm{k}-\mathrm{pa}\) ), and 'stab' in table 127 xx . The verb pilko 'stab' also shows multiple inflection for the non-1SG forms. For disyllabic verbs, then multiple exponence is the norm in Nyao; since the inflections are in all cases regular, it is highly likely that the synchronically disyllabic verbs reflect diachronic serial verbs, just as the various collocations involving the verbs of getting in Skou may well be developing into complex verbs such as are also attested in há hi 'count'.

Another possible source for what might well develop into complex verbal collocations involves the grammaticalisation of adjunct nominal + verb constructions, specifically the variety in which the agreement proclitic shows variation or a fixed position outside the nominal and verb together, thus treating them as if they were a single verb. This is described in 14.5.

\subsection*{7.9 Tense, aspect and mood}

The categories of tense, aspect and mood (henceforth TAM) are marked on a verbal clause in Skou by a combination of bound morphological forms, both segmental and suprasegmental, and the use of serialisation with a fixed range of verbs that have taken on aspectual functions. There are, additionally, a small number of time and aspect adverbials that may be used, in combination with other marking or alone. The following core TAM distinctions are made in verbal predicates, morphologically and with auxiliaries:
completed the semantically (and morphologically) least marked category. The essential meaning (according to speakers) is that the predicate has already run to completion;
irrealis intended, planned, not yet started; purposive clauses, resulting states;
intentional 'want', 'will' translations; similar to general irrealis, though more likely to be used with first person subjects in main clauses;
continuous the action is ongoing at the time of the reference of the speech act, and that ongoing aspect is emphasised by the speaker;
unmarked but this also functions as a default category, when specification is omitted.
There is not a neat paradigm with three or four TAM morphemes fitting into the same templatic position marking these four categories. Rather, these four distinctions are created by the use of three different morphosyntactic processes. The actual devices employed are:
tonal suppletion: delinking the lexical tone associated with the verb root (which results, phonetically, with a low pitch on the word - see 2.3.1.6);
serialisation: with 'do'; with 'be' and 'do' together;
reduplication: reduplicating the last syllable of the already inflected verb
These different processes can be seen in the following examples, which employ the verb root lá 'roast', which has a lexically-assigned high tone. In the first example we can see that the tone is low, and not the high tone that we find elsewhere on the verb (see the other following examples). In the second example the high tone of the lexeme is realised, but the syllable of the
verb stem (the prefixally-inflected stem, and not the entire, proclitic-inflected verbform) is reduplicated.

Tone of the verb is replaced with L pitch ('tonal suppletion')

> K óe=ing \(\quad\) te \(=r-a_{L}\).
> baked.sago=DEIC 3 3LL=3PL-roast
> 'They roasted the sago.'

Reduplication
Kóe=ing te=r-á-rá.
baked.sago=DEIC 3PL=3PL-roast-RED
'They will roast the sago.'
The next two examples, (190) and (191), show different serialisations employed to show aspectual distinctions. In the first example we can see that the verb stem is reduplicated. The second example has a simple, unreduplicated, verb stem, but the serialisation now involves not just the appropriately inflected form of the verb 'do', but rather the twin verbs 'be' and 'do' together. In this last example we can see that the lexically-assigned tone of the verb root is realised on a non-reduplicated stem, showing that it is not simply a phonological restriction that causes the tone in (189) to be realised as a low pitch, but a morphological one.

Reduplication and serialisation with 'do'
\begin{tabular}{ll} 
K óe=ing te=r-á-rá & ti \\
baked.sago=DEIC 3PL=3PL-roast-RED & 3PL.do \\
'They want to roast the sago.' &
\end{tabular}

Serialisation with 'be' and 'do'
\begin{tabular}{llll} 
K óe=ing & te=r-á & e & ti \\
baked.sago=DEIC & 3PL=3PL-roast-RED & 3PL.be & 3PL.do \\
'They are roasting the sago.' & &
\end{tabular}

Observe the reduplication pattern on the following disyllabic verb hàpe 'judge', showing clearly that it is the second, and not the first, syllable that is reduplicated.
(192) Ke mè=m-àpe-pe ka!

3SG.NF 2SG=2SG-judge-RED NEG
'Don't judge him!'
(193) * ke mè màmàpe ka

Additionally, the verb stem, uninflected for any of these categories, may be used in imperatives. These are not nonfinite clauses, since the verb is (at least optionally - see 18.1) inflected for features of subject and, depending on the verb, object as well, but they do not carry any information about TAM categories (except by their absence).

Imperative clause:
Kóe mè=p-á!
baked.sago \(2 \mathrm{SG}=2 \mathrm{SG}\)-roast
'Roast the sago!'
It is apparent that the four core distinctions in TAM which are overtly marked in Skou correspond to the three morphological devices as seen in table 128xxx. We can decompose the morphological composites found in the sentences above into the parameters of [auxiliary use] and [reduplication]. Further, there is a (redundant) stipulation that in the absence of either of
these features, the lexical tone of the verb is disassosociated, and in the absence of a phonologically assigned tone a low pitch is realised.

Table 128. The morphological markers of TAM
\begin{tabular}{cccc}
\hline Process: & [auxiliary]? & [reduplication]? & ([tonal stripping]?) \\
\hline • & completion & - & - \\
- & irrealis & - & + \\
- & intentional & + & + \\
- & continuous & + & - \\
\hline
\end{tabular}

We shall now examine the system underlying these four distinctions, arguing, based on the commonalities observed in the morphological mechanisms used to encode the four categories, that there are in fact two binary oppositions.

Not surprisingly, the two different morphological processes can be associated with two different semantic notions of aspect and mood. These might be added to table 128 xx as follows:
Semantic component: involvement irrealis

That is, the use of an auxiliary implies a greater degree of involvement on the part of the subject, while the use of reduplication indicates that the state or event has not yet started. The combination of involvement and irrealis indicates volition; the lack of either gives a completive interpretation.

Some variation is found with the continuous, in which the auxiliary component of the verbal complex may be reduplicated. The following two sentences are reportedly very similar in meaning.
\begin{tabular}{lllll} 
(195) & \begin{tabular}{l} 
Ne móe ne=yú \\
\\
\\
1PL fish 1PL=search.for
\end{tabular} & ne & 1PL.be & ti-ti. \\
'We're looking for fish.'
\end{tabular}

Another relevant factor in a description of TAM in Skou is the polarity of a sentence: negative sentences show a restricted range of aspectual choices compared to positive sentences (see also chapter 16). The negative equivalents of (188) - (191) above are shown in (197) (200).
\begin{tabular}{lll} 
K óe \(=\) ing & te=r-a & ka. \\
baked.sago= DEIC & 3PL=3PL-roast & NEG \\
'They didn't roast the sago.' &
\end{tabular}

Kóe=ing te=r-á-rá ka.
baked.sago=DEIC 3PL=3PL-roast-RED NEG
'They won't roast the sago.'
(199) Kóe=ing te=r-á-rá ka.
baked.sago=DEIC 3PL=3PL-roast-RED NEG
'They don't want to roast the sago.'
(200)
\[
\begin{array}{ll}
\text { K óe=ing te=r-á } & \text { ka } \\
\text { baked.sago=DEIC } & \text { 3PL=3PL-roast-RED } \\
\text { 'They aren't roasting the sago.' } &
\end{array}
\]

The completive and the irrealis show a simple addition of the negative morpheme; the two aspects that use an auxiliary both show the absence of this auxiliary in the negative, thus collapsing the distinction between the two irrealis categories, and in the continuous/present realising the finite verb without any auxiliary, but also without the tonal change that is characteristic of the completive. With verbs of motion, the schema is slightly different, with the auxiliaries permitted even in negative sentences, when called for by the intentional and the continuous, where they follow the negative. Examples of these are shown in (201) and (202).

Auxiliaries in the negative with verbs of motion
(201) Ne bàme=fuea ne=ne-ne ka ti. 3PL village=that 3PL=3PL.go-RED NEG 3PL.do
'They don't want to go to that village.'
\begin{tabular}{llll} 
Te te=y-á & ka & e & ti. \\
3pL 3PL=3pL-walk, & NEG & 3PL.be. & 3PL.do \\
'They aren't walking.' & & &
\end{tabular}

We can summarise the differences observed between TAM marking in positive and negative clauses in table 129 xx .

Table 129. Contrasting positive and negative sentences
\begin{tabular}{lllcrc}
\hline & \multicolumn{2}{c}{ Semantic features } & Positive & Negative & Negative (motion) \\
\hline complete & {\([-\) involved \(]\),} & {\([-\) irrealis \(]\)} & \(\mathrm{V}_{\text {pitch: } \mathrm{L}}\) & \(\mathrm{V}_{\mathrm{L}}\) NEG & \(\mathrm{V}_{\mathrm{L}}\) NEG \\
irrealis & {\([-\) involved \(]\),} & {\([+\) irrealis \(]\)} & \(\mathrm{V}-\mathrm{V}\) & V-V NEG & V-V NEG \\
intentional & {\([+\) involved \(]\),} & [+ irrealis \(]\) & V-V do & V-V NEG & V-V NEG do \\
continuous & {\([+\) involved \(]\),} & {\([-\) irrealis \(]\)} & V be do & V NEG & V NEG be do \\
\hline
\end{tabular}

A further morphological complication concerns the morphological realisation of TAM features, but does not seem to bear on their instantiation. The intentional, which combines reduplication and the use of an auxiliary in the positive, can be realised without reduplication on the main verb, but with the auxiliary reduplicated.

Intentional: reduplication on the main verb:
(203) Pa ke=k-ung-kung li. water 3SG.NF=3SG.NF-drink-RED do
'He wants to drink some water.'
Intentional: reduplication on the auxiliary:
(204) Pa ke=k-ung li-li.
water 3SG.NF=3SG.NF-drink do-RED
'He wants to drink some water.'
In the negative the main verb must show reduplication; it is not possible for the reduplication to appear on the auxiliary.

Negative intentional: reduplication on the main verb:
```

Pa ke=k-ung-kung ka li.
water 3SG.NF=3SG.NF-drink-RED NEG do
'He doesn't want to drink some water.'

```
```

(206) * pa ke=k-ung ka li-li. water 3SG.NF=3SG.NF-drink NEG do-RED

```

The reduplication of the auxiliary is also sometimes found in continuous sentences, giving a sense of irrealis continuity: the action is continuous at the time of reference of the speech act, but the results of the action are unrealised. In this case the auxiliary component that is reduplicated is the last syllable of the 'be + do' complex.

Continuous: reduplicated auxiliary
\begin{tabular}{lllll} 
Nì Áì pí & nì=lóeng & i li-li. \\
1SG father & speech & 1SG=say & be do-RED \\
'I was asking God.' & &
\end{tabular} 'I was asking God.'

Very occasionally the continuous is found with the main verb reduplicated, but this is not usual, and when brought to the attention of speakers most Skou people will 'correct' the reduplication, or change the auxiliary. For instance, at one point in a story one speaker, having produded the following sentence,

Continuous: reduplicated auxiliary
\begin{tabular}{llll} 
Ing a, pe hòe pe=tue-tue & e tue, \\
the & 3SG.F & sago & 3SG.F=3SG.F.do-RED
\end{tabular} 'So she was stirring the sago, ...'
then 'corrected' her utterance to
(209)
\begin{tabular}{lllll} 
Trus & hòe & pe=tue & e & tue. \\
[and. then] & sago & 3SG.F=3SG.F.do-RED & 3SG.F.be & 3SG.F.do
\end{tabular}
'And then she was stirring the sago.'
(Having already mentioned the subject pe 'she' in the immediately preceding discourse, the speaker judged this context enough to omit an overt freepronominal reference to the argument, adn to allow verbal agreement to be the sole exponence of the subject in the sentence.)
showing a clear judgement against reduplictation on the main verb when combined with the presence of the auxiliary set.

These variations in the realisation of the reduplication morphological feature show that there are two separate morphological processes operating together, even though both reduplication and auxiliary choice together instantiate the TAM paradigm. They must be kept morphologically distinct, since they behave in distinct manners.

\subsection*{7.9.1 M ore on reduplication}

The reduplication template is a simple monosyllabic one that applies from the right of the verb. On a monosyllabic verb, the directionality is not obvious, since both the base andthereduplicant are identical.
(210)
a. fi
meet 'meet'
b. fí-fí meet-RED 'will meet'
a. p-óe 2SG-get.PL 'you get many'
b. p-óe-póe

2SG-get.PL-RED
'you will get many'

With disyllabic predicates, however, it is clear that only the second syllable is reduplicated (the change in tone is due to the regular application of the tone sandhi rule seen in 2.3.1.1; in all cases the reduplicant shares the pitch specification of the original syllable):
a. te \(=y\)-a tà
3PL=3PL-sit sitting 'they sat'
b. te=ya tá-tà
3PL=3PL-sit sitting-RED
'they will sit'

Note that, even though in both cases it is only, and completely, a CV template that is reduplicated, from the second example we can see that the initial consonantal alternations due to underlying prefixation apply before the CV template finds its input.

I have one recorded instance of a reduplicant not reflecting the original syllable exactly, but changing the quality of the vowel (while preserving other rime features, such as nasalisation). This is shown in (212), with the verb leng 'become'.
a. leng
b. leng-lang
become
'become'
become-RED ,

Since this is the only instance of a change in vowel quality in the reduplicant, we cannot speculate about the mechanism behind the change. The fact that the second, and not first, part of the reduplicated form shows the altered vowel is further evidence that reduplication is suffixal in Skou, since it seems simpler to treat the vowel alternation as applying to the reduplicant rather than to assign it to the root, following the reduplication process.

\subsection*{7.9.2 Problems with the analysis}

One major problem with the analysis of the tense/aspect system presented here is that it is not yet predictive. For instance, not all predicates that express irrealis events will be encoded with reduplicated verbs. The following is an example;the use of féung 'tomorrow' marks the clause as irrealis, yet the verb not only does not have to appear with reduplication expressing the irrealis, but cannot, as seen in (21599)xxsecondonexx/

Fé-ung ne=n-úng.
tomorrow-now 1PL=1PL-drink
'We'll drink tomorrow.'
(215) * féung ne núng núng

We might postulate that overt marking of a future time in the clause in the form of a time adverbial conflicts with marking irrealis aspect on the verb, and this would fit the facts; there is a kind of morphological blocking applying, such that the TAM feature [irrealis] can only be realised once in a clause, either by means of a time adverbial or on the verb itself. This analysis does predict the fact that other marked verbal aspects are compatible with noncompletive events, as in (21699) in which an intentional, and so irrealis, clause can occur with an overt time adverbial.
(216) Ung a te=y-úng-yúng ti. now 3PL=3PL-drink-RED 3PL.do
'They want to drink now.'
This argues against the binary semantic featural analysis of TAM categories presented in 7.9, and for a four-way distinction in TAM categories, using the unitary features complete, irrealis, intentional and continuous, rather than the two binary features involved and irrealis, described in that earlier section.

Table 130. TAM coding options
\begin{tabular}{ll} 
V & habitual \\
VV & intentional \\
VV do & desiderative \\
V be + do & present continuous \\
V [low pitch] & past \\
V [low pitch] finish & perfective
\end{tabular}

There are clearly three morphological processes that can apply to the verb: reduplication, tone disassociation, and auxiliary addition. The effects of each process are as follows:

Table 131. TAM morphology and its features
\begin{tabular}{ll} 
Process & Result \\
reduplication & irrealis \\
tone disassociation & past \\
say & volition \\
be / do & continuous \\
finish & completed
\end{tabular}

We can arrange the semantic order of these changes in a hierarchical manner, showing which categories govern which other ones, in the manner shown in table xxxxxxxx.

Figure 9xx. Dependencies in the TAM system


These different distinctions are realised with the following pieces of morphology:

Figure 10xx. Dependencies in the TAM system


These different contrasts can be illustrated with the following simple paradigm of alternations.

Plain
(217) Nì ró à nì=hù.

1 SG clothes thread \(1 \mathrm{SG}=\) sew
'I sew clothes.'
Low pitch: past
Ni ró à nì=hu.
1 SG clothes thread \(1 \mathrm{SG}=\) sew
'I sewed (some) clothes.'
low pitch, 'finish': perfective
Nì ró à nì=hu loeng 1 SG clothes thread \(1 \mathrm{SG}=\) sew finish 'I have sewn (the) clothes.'
\(\mathrm{be}+\mathrm{do}\) : continuous
(220) Nì ró à nì=hù i li. 1 SG clothes thread \(1 \mathrm{SG}=\) sew be do 'I am sewing clothes.'
reduplication: intentional
(221)

reduplication + do: desiderative
(222) Nì ró à nì=hù-hù li. 1 SG clothes thread 1SG=sew-RED do 'I want to sew (some) clothes.'

Reduplication applies from the right edge of the verb; this is only noticeable with a verb of two or more syllables in length, as the reduplication only applies to one syllable.
Ya pe=w-a w-í-wí
tue.
thing 3SG.F=3SG.F-count \({ }_{1}\) 3SG.F-count2-RED 3SG.F.do 'She wants to count (something).'
(224) * ya pe wa-wa wí tue
(225) * ya pe wa-wa wíwí tue

In addition to the marking of TAM by the presence of various auxiliary elements, we need to examine the morphological forms that these auxiliaries take. While there are regularities, there are also some unexpected patterns.

\subsection*{7.9.3 Concordance between the main verb and the auxiliary}

The examples in xxx.5.1 have shown sentences with a first person singular subject, which for many verbs does not show agreement on the verb - this is certainly the case with the verbs 'be' and 'do'. With subjects other than 1SG, 2DU or 2PL, the verbs show the changes we would expect. While redundant in many ways, the following sentences show in complete form the changes associated with marking a clause with the auxiliaries i 'be' and li 'do', as well as the normal pronominal clitic agreement and the prefixal agreement, as realised on the glottalic verb root hú 'sew'. The degree of multiple exponence can be seen clearly, pronominal information appearing associated with the free pronoun, the pronominal clitic, the verbal prefix, and each of the two auxiliary verbs.
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{(226)} & \(N i\) & ró & à & \(n i ̀=h u ̀ ~\) & \(i\) & \(l i\). \\
\hline & 1SG & clothes & thread & 1SG=sew & be & do \\
\hline \multirow[t]{2}{*}{(227)} & Mè & ró & à & \(m \grave{e}=m\) - & & \\
\hline & 2SG & clothes & thread & 2SG=2SG-sew & 2SG.be & 2SG.do \\
\hline \multirow[t]{2}{*}{(228)} & Ke & ró & à & \(k e=k\)-ù & \(i\) & \(l i\). \\
\hline & 3SG.NF & clothes & thread & 3SG.NF=3SG.NF-sew & be & do \\
\hline \multirow[t]{2}{*}{(229)} & Pe & ró & à & \(p e=w\)-ù & \(e\) & tue. \\
\hline & 3SG.F & clothes & thread & 3SG.F=3SG.F-sew & 3SG.F.be & 3SG.F.do \\
\hline \multirow[t]{2}{*}{(230)} & Anake & ró & à & \(n \boldsymbol{e}=\boldsymbol{n}\) - u & ne & \\
\hline & 1du.EX & clothes & thread & \(1 \mathrm{PL}=1 \mathrm{PL}-\) sew & 1PL.be & 1PL.do \\
\hline \multirow[t]{2}{*}{(231)} & Anape & ró & a & \(n \boldsymbol{e}=\boldsymbol{n}\) - u & ne & \(t i\). \\
\hline & 1DU.EX.F & clothes & thread & \(1 \mathrm{PL}=1 \mathrm{PL}-\) sew & 1PL.be & 1PL.do \\
\hline \multirow[t]{2}{*}{(232)} & Amanè & & à & \(n e=n\) - & ne & \\
\hline & 1DU.IN & clothes & thread & \(1 \mathrm{PL}=1 \mathrm{PL}\)-sew & 1PL.be & 1PL.do \\
\hline \multirow[t]{2}{*}{(233)} & Enake & ró & à & \(e=h u ̀\) & \(i\) & \(l i\). \\
\hline & 2DU & clothes & thread & \(2 \mathrm{PL}=\) sew & be & do \\
\hline \multirow[t]{2}{*}{(234)} & Enape & ró & a & \(e=h u ̀\) & \(i\) & \(l i\). \\
\hline & 2DU.F & clothes & thread & \(2 \mathrm{PL}=\) sew & be & do \\
\hline \multirow[t]{2}{*}{(235)} & Tenake & ró & à & \(t e=y\)-hù & \(e\) & \\
\hline & 3DU & clothes & thread & \(3 \mathrm{PL}=3 \mathrm{PL}-\) sew & 3PL.be & 3PL.do \\
\hline \multirow[t]{2}{*}{(236)} & Tenape & ró & à & \(t e=y\)-hù & \(e\) & \(t i\). \\
\hline & 3DU.F & clothes & thread & \(3 \mathrm{PL}=3 \mathrm{PL}-\) sew & 3PL.be & 3PL.do \\
\hline \multirow[t]{2}{*}{(237)} & \(N e\) & & & \(n \boldsymbol{e}=\boldsymbol{n}\) - u & & \\
\hline & 1PL & clothes & thread & \(1 \mathrm{PL}=1 \mathrm{PL}-\) sew & 1PL.be & 1PL.do \\
\hline \multirow[t]{2}{*}{(238)} & \(E\) & ró & à & \(e=h u ̀\) & \(i\) & \(l i\). \\
\hline & 2PL & clothes & thread & \(2 \mathrm{PL}=\) sew & be & do \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|}
\hline Te & ró & à & \(t e=y\)-ù & \(e\) & \(t i\). \\
\hline 3PL & clothes & thread & 3PL=3PL-sew & 3PL.be & 3PL.do \\
\hline & She/We & ou/They & am/are/is sewin & & \\
\hline
\end{tabular}

In some verbs we find disagreement in the pronominal features encoded between the main verb and the auxiliary. The following textual example in (240) shows a main verb with a 1PL subject, as evidenced by the storyline and the proclitic agreement on the verb, yet the auxiliaries do not show the expected (and also grammatical) ne ti forms, but rather e tue, the 3SG.F forms. The prescriptively 'correct' version of the clause is shown in (240)'.
\begin{tabular}{llll} 
te=H úngfa=ko & ne=moe & e & tue, \\
\begin{tabular}{ll} 
3PL=Sentani=OBV & 1PL=return
\end{tabular} & \begin{tabular}{l} 
3SG.F.be \\
'from Sentani, we were returning,
\end{tabular} & 3SG.
\end{tabular}
\(\begin{array}{llll}\text { te=H úngfa=ko } & \text { ne=moe } & \text { ne } & \text { ti, } \\ \text { 3PL=Sentani=OBV } & \text { 1PL=return } & \text { 1PL.be } & \text { 1PL.do }\end{array}\)
This is a different type of disagreement to that discussed later in 12.3.2, where disagreement in motion verb constructions sometimes show a lack of agreement marking on directional verbs in the serialisation construction, or to that seen in 7.8, discussing the coding of features associated with objects in serial verb constructions. With the disagreement in the aspectual marking verbs above we can see that the disagreeing version is not simply not marked for first person plural, but rather it is overtly marked for third person feminine. A version of (240) with simple null-agreement would be as shown in the ungrammatical (240)".
\begin{tabular}{rll}
\((240) " *\) te \(=H\) úngfa \(=k 0\) & ne=moe & i li, \\
\(3 P L=S e n t a n i=O B V\) & \(1 P L=r e t u r n ~\) & be do
\end{tabular}

This ungrammatical form of disagreement is separate from the attested disagreement in serial verb constructions involving motion verbs, described in 12.2.

\subsection*{7.9.4 O ther markers of tense, aspect or mood}

There are two cases of what were almost certainly originally serial verbs which have now become aspectual markers. These are the verbs re 'go' and loe 'come', which are used aspectually in the third person singular feminine form, te, for 'go', and in the general third person form, toe, for 'come'. The link between the inflecting verbs and the aspectual markers is proposed because of the close meanings that hold between the verbs and the aspect marking, making a grammaticalisation not unlikely. Compare the meanings of the independent verbs and the aspect markers, shown together in table 132 xx , with the aspectual meanings associated with grammaticalisedverbs of 'going' and 'coming' in other languages (taken from Hook 1974, Hopper and Traugott 1993).

Table 132. The verbs re and loe compared with the aspect markers te and toe
\begin{tabular}{lllll}
\hline \hline & & Attested meaning in Skou & Aspectual meanings found comparatively \\
\hline Verbs & re & motion away from speaker / locus \\
& loe & 'future', 'frequentive' \\
motion towards speaker / locus & 'becoming', 'frequentive', 'potential' \\
Aspect & te & continuous aspect \\
markers & toe & resulting states, endpoint & \\
\hline \hline
\end{tabular}

Given the plausibility of a link between the observed free verbs and the aspect markers, we must investigate the status of these morphemes when they are used with aspectual uses, and contrast these uses with others. There is no longer any sense of any particular person or number associated with these forms when they are used aspectually, but they nonetheless appear in the position we would expect of an auxiliary verb (following a main verb and goal NP, and preceding a location NP). To what extent are they still verbs? This can be answered by taking near-identical sentences, as proposed above.

Compare, for example, the following two sentences, apparently using the same lexical items, but with different interpretations.
\begin{tabular}{llll}
\(\mathrm{Pe}=\) eueme=ing a & pe-w-a & te & báng. \\
3SG.F=woman=the & 3SG.F=3SG.F-walk & 3SG.F.go & beach
\end{tabular}
'The woman walked to the beach.'
\(\mathrm{Pe}=\) ueme=ing a pe-w-a te báng. 3SG.F=woman=the 3SG.F=3SG.F-walk '3SG.F.go' beach 'The woman walked and walked on the beach.'

In the first sentence above the verb sequence pe wa te functions as a serial verb construction; the verb ha 'walk' indicates the manner of motion, and the appearance of a goal is licensed by the use of the simple motion verb re 'go' (an alternative would be the use of an applicative suffix - see 13.2). The construction can be seen as a serial verb construction because the goal, báng, appears following both verb roots. In the second sentence the verb te is present as an auxiliary; the oblique NP that follows it can only be interpreted as a location, not as a goal, and it has an aspectual, not directional, role in the sentence. Morphologically we can test and prove these different uses by examining equivalents of the two sentences above with a subject of a different person/number/gender. In (99) and (99) we can see sentences equivalent to (99) and (99), except cast with a non-feminine subject. Where the verb of simple going is part of a serial verb construction the verb must show person, number and gender agreement with the subject matching the agreement marked on the main manner-of-motion verb. This is a general principle that governs serial verb constructions, and is described in more detail in 12.4; the ungrammaticality of (99)', which is identical to (99) except for the use of a 3SG.F form of the verb, and so cannot have the reading. Yet in (99), in which the aspectual use is intended, there can be no agreement in person, number and gender categories on the putative verb of going. This is taken as evidence that the form te has in this use grammaticalised away from the meaning of 'go', and into an uninflecting aspect marker, which is not grammatical if it appears in an inflected form to agree with the subject.

Motion-verb sentence using ti '3SG.NF.go'
Ke=bà=ing a ke-k-a ti báng.
3SG.NF=man=the 3SG.NF=3SG.NF-walk 3SG.NF.go beach
'The man walked to the beach.'
* ke=bà=ing a ke-k-a te
báng
3SG.NF=man=the 3SG.NF=3SG.NF-walk '3SG.F.go' beach
'The man walked to the beach.'
Motion-verb sentence using te '3SG.NF.go'
\(K e=b a ̀=i n g ~ a b-k-a \quad\) te
báng.
3SG.NF=man=the 3SG.NF=3SG.NF-walk '3SG.F.go' beach
'The man walked and walked on the beach.'
\[
\begin{array}{lll}
\text { * ke=bà=ing a } \quad \text { ke-k-a } & \text { ti } & \text { báng }  \tag{244}\\
\text { 3SG.NF=man=the } & \text { 3SG.NF=3SG.NF-walk }
\end{array} \text { 3SG.NF.go } \quad \text { beach }
\]

It is most economical to propose that a model of (99) - (99) would show the templatic structures described in (99)' and (99)', respectively.
[np Subject] [np Object] [v ]=[v] [np OBL:Goal] [v Auxiliary] [np OBL:Location].
(241)' Pe ueme ing a
(242)' Pe ueme ing a
pe wate báng.

While the verb (at least when inflected for 3SG.F) and the aspect marker are phonologically identical, we can see that they are syntactically quite distinct. This strongly suggests that they are not morphologically congruent either.

Similar arguments apply to the use of toe as an aspect marker. It is true that sentences such as (99) appear to show agreement (or, at the least, no disagreement) between the subject and the verb, testing with non-third person subjects shows that this is a fortuitous accident arising because of the particular subject that appeared being third person in (99).
\[
\begin{align*}
& \text { Hòe=ing } \quad \text { pe=wé=ko toe langpi. }  \tag{245}\\
& \text { sago=the } \quad \text { 3SG. }=\text { get.F=OBV } \\
& \text { 'She stirred the sago until it became delicious.' delicious }
\end{align*}
\]

When we replace the third person subject with a non-third person subject, we see that the form of the putative verb is still toe, with no change for person. In (99)' the form of the verb 'come' is that which we would expect with a 1SG subject, yet the sentence is ungrammatical. Clearly there is no pattern of agreement here.
\[
\begin{array}{llll}
\text { Hòe=ing } & \text { nì=wé=ko } & \text { toe } & \text { langpi. }  \tag{246}\\
\text { sago=the } & \text { 1SG=get.F=OBV } & \text { '3.come' } \\
\text { 'I stirred the sago until it became delicious.' }
\end{array}
\]
\[
\begin{array}{rlll}
(246)^{\prime} * \text { hòe=ing } & \text { nì=wé=ko } & \text { loe } & \text { langpi. } \\
\text { sago=the } & \text { 1SG=get.F=OBV } & \text { come } & \text { delicious }
\end{array}
\]

From these morphological tests we can conclude that, although there is very likely (given the meanings involved) to be a diachronic connection between the independent verbs te ' go ' and toe 'come' and the aspect markers te and toe, this relationship is no longer productive, and the aspect markers cannot be regarded as grammaticalised motion verbs in a serial verb construction with the main verb. We have seen evidence that the aspect markers te and toe differ from the (serial) verbs 'go' and 'come' in the following ways:
- the aspect markers te and toe do not show agreement for subject, whereas serial verbs do;
- the aspect markers appear in a position following a goal, structurally, whereas serialised motion verbs appear in the main verbal position, preceding any goal;
- the post-goal position is otherwise only occupied by the aspect-marking \(i\) 'be' and li 'do', which are also verbs that have grammaticalised away from their verbal function to a more dedicated aspect-marking pair of morphemes.
These facts indicate that we must treat the aspect-marking use of te and toe separately from their motion-verb functions. The following example clearly shows complete semantic bleaching
of the verb toe, being used purely in an aspectual sense. The fact that it is followed by te 'she goes' makes it clear that it does not have any motion sense.
\[
\begin{align*}
& \begin{array}{l}
\text { Te=ing a=ko bépú- } \text { pú } \quad \text { toe=ing=pa }
\end{array} \quad \text { pe=te }  \tag{247}\\
& \text { 3PL=the=OBV lay-RED 3.come=DEIC=INSTR } \\
& \text { 3SG.F=3SG.F.go } \\
& \text { W-a=pa tú=ko } \\
& \text { 3SG.F-walk=INSTR carry.PL=OBV } \\
& \text { 'those things, she lays (her eggs) on them, so she goes about and gets them } \\
& \text { and then, ...' }
\end{align*}
\]

It is clear that this use of te and toe is not simply a serialisation of the verbs that they represent, but that some degree of grammaticalisation has taken place.

\subsection*{7.9.4.1 Aspect marking on non-dynamic predicates}

An ongoing sense (continuative/persistent), similar to that marked by English 'still', can be found with a stative predicate (adjectival, nominal or stative verb) can be achieved by using the combination 'be+do' as an auxiliary element. This is used rather than 'be+do', the continuative aspect serialisation that is found on active predicates. The iconic use of a locational verb with a temporal, and not a strict locational, sense is not unexpected, and the distribution of the two, with the 'be' serialisation appearing with stative predicates only, and the 'be' serialisation with active predicates, is a result of the basic function of 'be' as locating the subject (in either time or space). A stative predicate, which does not require any auxiliaries to assume a continuous aspectual interpretation, does not appear with this serialisation.

The difference in interpretation between a predicate with 'be+do' (or one of the other verbs of existence that can stand in for 'be', such as moeng 'sit', rue 'stand' - see 7.9.4.1) and one without, can be seen in the following pair of sentences. In the first sentence there is no aspectual reading inherently associated with the clause, which, given that there is no verb, is not unexpected. With 'be+do' marking there is a particular emphasis on the ongoing, current, aspect of the state, and so it tends to acquire the aspectual sense that is best translated with 'still'.
\[
\begin{align*}
& \text { Ku-nì=ne }  \tag{248}\\
& \text { child-1SG.GEN=1SG.DAT } \begin{array}{l}
\text { rilele. } \\
\text { 'My child's short.' }
\end{array}
\end{align*}
\]
\begin{tabular}{lll} 
Ku-nì=ne rílele & e & tue. \\
child-1SG.GEN=1SG.DAT short & 3SG.F.be & 3SG.F.do \\
'My child's still short (right) now.' &
\end{tabular}

This second sentence has the same semantic content in its predicate as the simple adjectival predicate in (99), but with the verbs i 'be' and li 'do', inflected for third person singular feminine, marking the aspectual difference. The meaning of this marked aspect is largely predictable from the meaning of the 'be+do' serialisation with verbal predicates. Something that is unique to adjectival predicates is an alternative. In this aspect marking, seen in (99), there is also a pair of serial verbs following the adjective, but now the verbs rue 'stand' and li 'do', inflected for third person singular feminine, also appear. The aspectual meanings associated with the use of 'be+do' that have been described in 7.9 are found with the adjectival predicate as well, using a stance verb in place of the more generic 'be' verb.
Ku-nì=ne rílele ro
child-1SG.GEN=1SG.DAT short
'My daughter's still short.'
(implication: she hasn't grown as much as was expected)

In this clause it appears best to consider rílele 'short' not as the predicate, but as a adverbial comment on the predicate; a more literal glossing might be 'My daughter is standing short(ly).' This interpretation does not explain the aspectual readings associated with the use of this construction; it does, however, account for the fact that such a predicate is highly restricted, requiring a vertically growing sentient subject and a height-dimension small clause associated with it. It is probably best interpreted as a main verb, which, given that it occurs in the same frame in which the light verb li 'do' can appear when an adjectival predicate marks an over aspect, makes sense.
\begin{tabular}{ll} 
K e=lú weng & i li. \\
3sG.NF=eye sleep, & be do \\
'He's still asleep.' &
\end{tabular}

There are no pragmatic or semantic difference between these two coding choices, and the alternative with 'stand' simply reflects the fact that a stative verb inherently has extension in time, and so satisfies the condition that it must have a location for the 'stand' verb to point to. A non-stative verb such as rue 'stand', on the other hand, does not allow this option:
Ke=k-a tà i li.

3SG.NF=3SG.NF-walk running be do
'He's running.'
\((253)\) * ke=k-a tà rue li.
3SG.NF=3SG.NF-walk running stand do
We can see that the eligibility of a predicate to occur with 'stand' is thus dependant not on the syntactic category to which that predicate belongs, but to the semantics of the predicate. In this way nominal, adjectival and stative verbal predicates all group together, against non-stative predicates which xxxxxxxxxx
compare these with clauses in which we have an adjective as the (semantic) predicate of the clause.

Ku-nì=ne rílele.
child-1SG.GEN=1SG.DAT short
'My child is short.'
XXXXXXX

\subsection*{7.9.5 Other aspectual morphosyntax}

In addition to the preceding exposition, there are some other morphemes that are also brought into use as markers of aspect.

\subsection*{7.9.5.1 Completeness}

In a case like (99) we can wonder if there is in fact any grammaticalisation, since a regular switch reference construction would also be expected to yield the same reading.
(99) Hòe te=t-ang=ko ka.

1 SG 3 PL=3PL-eat=OBV NEG
'They ate all the sago.'
("They ate the sago such that there was no more left.")
Proof that this is in fact grammaticalised can be seen in sentences such as (99), where there is a degree of metaphorical extension that is not present in (99).
\(\begin{array}{lllll}\text { (99) } & \text { Nì } & \text { tang } & \text { nì=li=ko } & \text { ka. } \\ & \text { 1SG } & \text { canoe } & 1 \mathrm{SG}=\mathrm{do}=\mathrm{OBV} & \text { NEG }\end{array}\)
'I made the canoe completely.'
("I made the canoe such that there was nothing left (to do).")

\section*{XXXXXXXXX}

\subsection*{7.9.5.2 existence}

The absolute existence of a noun phrase is expressed with the same construction that is used to express the location of something or someone, but without a location being specified.
```

Ke=bà=huefa-mè=me moeng li?
3SG.NF=person=old-2SG.GEN=2SG.DAT sit do
'Is your father still alive?'
(that is, 'Does your father exist?')

```

\subsection*{7.9.5.3 still, be at}

A sense of continuation, similar to that implied by English 'still', with a stative (adjectival, nominal or stative verb) predicate can be marked by using the combination 'be+do' as an auxiliary element. This is used contrastively compared to simple non-verbal copular constructions with predicative NPs, which simply imply a continuous aspect on an active predicate and which do not allow for aspect marking (see xx.xx.xx). The iconic use of a locational verb with a temporal, rather than strict locational, sense is in keeping with the overlap of range for location-referring expressions into the temporal domain; see the discussion of te and toe in 7.9.4.
\begin{tabular}{lll} 
(99) & Ke & angleng. \\
& 3sG.NF & bachelor \\
& 'He's a bachelor.'
\end{tabular}
(99) Ke angleng rue li. 3SG.NF bachelor stand do 'He's still unmarried.'

XXXXXXXX

\subsection*{7.10 Summary of verbal morphological patterns}

The main morphology associated with the verb is subject agreement, with most verbs obligatorily showing agreement for this argument by both prefix and by proclitic. In almost all cases the prefixes show a strong degree of fusion with the initial consonant of the verb, and in
many cases the phonological result of these 'fusions' is not entirely predictable: a strong degree of stipulativeness is present in the system.

The fact that various types of vowel alternation, in terms of their pronominal status, are also found raises problems for the idea that features are associated with particular morphemes or morphological operations. There is clearly a morphological alternation in vowel quality, a kind of umlaut that reflects earlier stages in the history of Skou in which a morpheme with a high front vowel (plural) or high back rounded vowel (feminine) was suffixed to the verb, an affixation which is now observable only in the changes in vowel quality in the stem (Donohue 2003b). Problematically, however, we find this same morphological process now being used with a fully pronominal interpretation in some cases, and without that interpretation in others. An incremental approach to morphology would have to ignore the immense similarities found in the uses of this vowel alternation operation, and posit two separate (and phonologically identical) processes.

Aspect is marked on the verb not by a series of specifically aspect marking morphemes, but by a variety of means: there is one dedicate morpheme, a tonal tense marker, which marks past tense by removing any tone melodies that are lexically associated with the verb. Reduplication and serialisation also play a role, and the tense/aspect system shows a reduced number of distinctions when it operates in negative clauses (see chapter 16).

\section*{8 Nominal Phrases}

The noun phrase in Skou is in general unmarked in the clause (the only exception being instruments - see 3.2 and 11.6), depending on position more than morphology to indicate its role in the clause. Reflecting this, there are more issues concerning position and structure inside the NP than there are to do with any specific morphology. The only exceptions to this involve possession, which is discussed in detail in chapter 9, and perhaps, in a peripheral sense, relative clauses. Relative clauses co-opt existing morphology as part of their structure.

\subsection*{8.1 Elements of the nominal phrase}

The morphology of the noun phrase is not complicated. Despite the lack of much dedicated morphology, there are several twists in phrase structure configurations involved in the description of these phrases. Most of the functional morphemes are based on the prime pronouns (6.2), and their spread into various functions.

The primary structural division is between the obligatorily present head, the N , with any independent modifiers (consisting of at least one free word) and any demonstratives, which are clitics that follow this unit:
(1)


Non-pronominal inflection with the instrumental case marker also found in the D position (see 4.9). This means that case-marked instruments cannot appear with deictic modification. If an instrument must be marked with a deictic, it is coded with a serial verb construction. See 11.xxx for examples.

Within the NP the head is initial, with all modification following. Examples of different kinds of modification can be seen in the following phrases:
(2)

NP with Adjective modifier
pá rong
house old
'old house'
NP with Numeral modifier
(3)
pá héngtong
house three
'three houses'

NP with Relative clause modifier
```

naké hòe-nì=ne ke=k-ang=ing a
dog sago-1SG.GEN=1SG.DAT 3SG.NF=3SG.NF-eat=the
'the dog which ate my sago'

```

It is very rare for more than one modifier to appear inside an NP; additional properties specifying a nominal appear are more likely to appear as a series of predicates modifying the one bare noun. In the relative clause example the demonstrative ing a is final in the NP, and is completely compatible with other NP modification: pá rong ing a, pá héngtong fue a, etc. With the relative clause modifiers, this D is obligatory: sentence (5), which attempts to show a relative clause modifying the head noun naké, can be made grammatical by the addition of a D following \(k e=k-a n g\).
* nì [np naké hòe nì ne ke kang ] nì yú i li
'I'm looking for the dog which ate my sago'
(6) Nì [Np naké [hòe-nì=ne ke=k-ang]=ing a ]

1SG dog sago-1SG.GEN=1SG.DAT 3SG.NF=3SG.NF-eat=the
nì=yú i li. 1SG-search be do 'I'm looking for the dog which ate my sago'
Further details on the morphosyntax of relative clauses can be found in 8.3. The only prehead modification that may appear is a gender/number marking pronoun, with certain human nouns (see 6.3.2), or a possessor. The full structure of a nominal phrase is then that seen in (7).


In this example the possessor is a full NP, and so subject to modification of its own. Some examples of modified possessing NPs are shown in (8), where the possessor is modified by a numeral, and (9), in which there is possessive modification of the possessor of the head.
\begin{tabular}{|c|c|c|c|}
\hline IN & púle & hìngtung] & ró-tè=te \\
\hline & cuscus & two & skin-3PL.GEN=3PL.DAT \\
\hline the skin & two & & \\
\hline
\end{tabular}
```

[NPPoss'r nì [NPPoss'r bápáne-nì-ne ] ]
1SG friend-1SG.GEN=1SG.DAT
te=angku-pè=pe
3PL=child-3SG.F.GEN=3SG.F.DAT
'my (female) friend's daughters'

```

When more than one modifier, other than a relative clause, is found in the same NP, then there is not a fixed order to their occurrence, as can be seen by comparing the following sentences:
(10) Púle bápáli hìngtung nì=fe.
cuscus big two \(1 \mathrm{SG}=\) see. PL
'I saw two large cuscuses.'
(11) Púle hìngtung bápáli nì fe.

Taken out of context the second of these phrases (the less common of the two) would be considered ungrammatical. The following strings of words, analogous to the NPs in (10) and (11), could be taken as demonstrating that phrases occur with the fixed order Noun-AdjectiveNumeral, but in fact show a strong preference for treating a numeral as a predicate in a nonverbal clause. We have seen in (11) that Noun-Numeral-Adjective is possible in an NP, but the data below show that a sequence of two potential NP modifiers, when presented with a noun out of context, will be interpreted as a lighter NP and a predicate, and that, given this parsing, the numeral cannot be the NP modifier.
(12) Kungpáue bápáli hìngtung. spider big two
'There are two big spiders.'
(literally, 'The big spiders are two.')
(12)' [NP kungpáue bápáli ] [PRED hìngtung ]
(12)" * [NP kungpáue bápáli hìngtung ]
(13) * kungpáue hìngtung bápáli
'the two spiders are big'
(13)' * [NP kungpáue hìngtung ] [PRED bápáli ]

Judgements about the grammaticality of these clauses are quite clear, with a numeralmodified noun predicated by an adjective being judged not just unlikely or unusual, but outright unacceptable. Relative clauses, including relative clauses consisting of a simple stative verb, may never precede a numeral. Compare the grammatical appearance of an N-ADJ-NUM sequence in (12) with the ungrammatical use of a relative clause in this same position.
\[
\begin{align*}
& \text { * púru [RC ku te ] hìngtung te=moe y-a tà. }  \tag{14}\\
& \text { white.tree.kangaroo fall two 3PL=return 3PL-walk run } \\
& \text { '(The) two cuscuses which fell (down) ran (bounced) away.' }
\end{align*}
\]

These modifiers may appear grammatically in the same NP, as seen in (15), in which the relative clause appears following the numeral.
(15) \(P\) úru hìngtung ku te ing te moe ya tà.
'The two cuscuses which fell (down) ran (bounced) away.'
More details concerning relative clauses can be found in 8.3.

\subsection*{8.2 Pronouns in the nominal phrase}

Pronouns can appear with a summarising function in the D position when there is a filled NP, but may also appear by themselves or modified by a deictic, either the definite ing a or the prominence marker a. Other, more spatially explicit, demonstratives such as wi a 'this' and fue a 'that' may not be used on pronouns. The use of a is common with identificational focus or topicalised nominals, which occurs most commonly with third persons. The use of ing a is also found with third persons, but is more common on first or second person pronouns, where it is sometimes found in emphatic contexts.
\[
\begin{align*}
& \text { Pe=a nì=pung i li. }  \tag{16}\\
& \text { 3SG. } \mathrm{F}=\mathrm{PROM} \text { 1SG=liver be do } \\
& \text { 'She is the one that I love.' }
\end{align*}
\]
\[
\begin{align*}
& \text { M è=ing a ya mè=pi? }  \tag{17}\\
& \text { 2SG=the what 2SG=2SG.do } \\
& \text { 'What have you done?' } \\
& \text { (as opposed to some other recent addressee, eg. when talking to a group of } \\
& \text { children one by one) }
\end{align*}
\]

Apart from the use of the prominence markers or definiteness markers to mark pronouns (or other nominals) when they are topics, the use of a demonstrative with a pronoun is extremely uncommon for objects, and is most likely with As or obliquely coded nominals. The following sentences show that it is acceptable for the subject of a bivalent to be marked with a deictic, or even for the originally obliquely coded recipient to be marked with a deictic (see xx.xx and \(\mathrm{xx} . \mathrm{xx}\) for more discussion on the status of recipients generally, and in negated clauses).

Bivalent subject pronoun marked with a pragmatic deictic
```

Pe=a ke=angku=inga pe=fu.
3SG.F=PROM 3SG.NF=child=the 3SG.F=see.F
'She saw the boy.'

```

Obliquely coded pronominal P marked with a pragmatic deictic
\begin{tabular}{lll} 
Rópu=ing a \(\quad\) nì=leng \(\quad\) ke=a & ka. \\
book=the & 1SG=give 3SG.NF=PROM & NEG \\
'I didn't give the book to him.'
\end{tabular}

In the negated clause shown above, the obliquely coded recipient is in fact treated, morphologically and syntactically, as a normal object, and so we must conclude that the restrictions on the appearance of deictics on pronouns refers to their lexical specification in the predicate, and not their surficial realisations.

In addition to these uses of deictic marking on pronominals when they serve as A or (obliquely coded) P , respectively, we also find complete acceptability of deictics when used with oblique pronouns (though this is rare, probably reflecting the rarity of pronouns in oblique functions).

Oblique pronouns marked with a deictic
\(\mathrm{Pe}=\) angúe=ing a pe=te \(\mathrm{ke}=\mathrm{a}\).
3SG.F=unmarried.woman-=the 3SG.F=3SG.F.go 3SG.NF=PROM
'The unmarried girl went up to him.'

Despite these freedoms, from (21) we can see that it is not entirely felicitous for an \(S\), the subject of a monovalent clause, to be marked with a pragmatic deictic, and (22) shows that a pronominal \(P\) is not felicitous with deictic marking.

Infelicitous use of deictics on an \(S\) (monovalent subject) pronominal
\begin{tabular}{llll} 
\# M è=a & mè=me-me & pi & ná? \\
2SG=PROM & 2SG=2SG.go-RED & 2 SG.do & Y/N \\
'Do you want to go?' & &
\end{tabular}

Infelicitous use of deictics on a pronominal \(P\)
(22)
\begin{tabular}{lll} 
\# K e=angku=ing a & pe=a & ke=fu. \\
3SG.NF=child=the, & 3SG.F=PROM & 3SG.NF=see. \\
'The boy saw her.' & &
\end{tabular}

When followed by the clitic \(a\), the pronoun has a more individual-identifying sense, as if it is identifying the referent from a selection of other possibilities in a set that the speaker has in mind. In (19), therefore, the use of \(\mathrm{ke}=\mathrm{a}\) rather than simply ke indicates that the identity of the person in question what either a surprise, or else was contrastively focussed with respect to some other possible, and recently mentioned, referent.

\subsection*{8.3 Relative clauses}

Relative clauses in Skou are most productively found post-nominally, and a relative clause, regardless of position, is almost invariably followed by a demonstrative. A simple example of this construction is shown in (23), in which the relative clause is bracketed and the head noun is shown in bold:
\begin{tabular}{|c|c|c|c|}
\hline [ \(\mathrm{NP} \boldsymbol{k e}=\mathbf{a n g k u} \boldsymbol{- n i ̀}=\boldsymbol{n e}\) & [RC hòe & ke=k-ang ] & =ing ] \\
\hline & & & \\
\hline \begin{tabular}{l}
3SG.NF=child-1SG.GEN=1SG.DAT \\
'that son of mine who ate (the) sago'
\end{tabular} & sago & 3SG.NF=3SG.NF-eat & DEIC \\
\hline
\end{tabular}

The sentence above shows a relative clause in which the head serves as the subject of the relative clause. As we shall see in this section, there are in fact no restrictions on the grammatical function of the head of a relative clause of this type. We may model the structure of the most common relative clauses as follows:

Basic relative clause structure
(24) N [RC \(\ldots \mathrm{V}\) ] DEM

The use of a demonstrative in the NP that contains the relative clause is not absolutely required, but its appearance correlates strongly with arguments appearing that bear one of the more core syntactic roles, which in turn are more likely to be more highly prominent in the discourse. It may be, then that the appearance of a demonstrative of some sort is not part of the relative clause construction, and as such on a par with relativisers such as 'which' or 'that' which are found in English, but simply another morphosyntactic consequence of the pragmatic conditions that lead to a relative clause being used to modify a noun, rather than an independent clause. Some evidence for this is the fact that the demonstrative may be found on the head of the relative clause, rather than at its end, thus satisfying the need for marked prominence. This might be a sort of appositional relative clause, appended to the entire NP, or an alternative structure with the relative clause following the demonstrative. An example can be seen in (25).
\begin{tabular}{|c|c|c|c|c|}
\hline Bàng & ke=balèng=ing a & [RC púle & ke=jí ] & nì=re \\
\hline yesterday & 3SG.NF=man=the & cuscus & 3SG.NF=hit.PL & \(1 \mathrm{SG}=\mathrm{go}\) \\
\hline nì=fí-fí & li. & & & \\
\hline \(1 \mathrm{SG}=\mathrm{me}\) & t-RED do & & & \\
\hline 'I'm goi & gh to meet the man w & killed the & uscuses yesterd & \\
\hline
\end{tabular}

Arguments that this relative clause type is externally headed, and not internally headed, will be presented in 8.3.3, where a more detailed account of the morphosyntax of this construction will be presented.

A second relative clause type is found, only when the head of the relative clause is an object of the clause. In this case the noun appears internal to the relative clause, a common pattern for object-headed relative clauses in Papuan languages. The basic relative clause is also possible for these nominals. An example of two phrases, exemplifying both types of relative clause, are shown in (26) and (27), with the same conventions as were used earlier.
\[
\begin{align*}
& \begin{array}{l}
\text { sago }{ }^{\text {3sG. }} \text { 'the sago that my son ate' }
\end{array}  \tag{26}\\
& \begin{array}{llll}
{[\text { RC } \text { ke=angku-nì=ne }} & \text { hòe } & \text { ke=k-ang] } & =\text { ing a } \\
\text { 3SG.NF=child-1SG.GEN=1SG.DAT } & \text { sago } & \text { 3SG.NF=3SG.NF-eat } & =\text { the }
\end{array}  \tag{27}\\
& \text { 'the sago that my son ate' }
\end{align*}
\]

The second phrase is identical in form to an adverbial clause, with the meaning 'because my son ate (the) sago'. Despite this, intonation and the context serve to unambiguously disambiguate these two possible readings. With an adverbial reading the intonation rises to the last syllable of the verb, and then drops sharply after ing a. With a relative clause, on the other hand, the intonation is more level right until the completion of the demonstrative form, as is to be expected from a non-intonation phrase final unit (that is, a single element inside an NP, not IP-final).

The structure of this second relative clause type is modelled in (28). Although the position of the head of the relative clause is different to those relative clauses seen at the start of this section, the requirement that they appear with a demonstrative is maintained.

\section*{Internal relative clause structure}
\[
\left[\begin{array}{ll}
{[\mathrm{RC}}  \tag{28}\\
\hline
\end{array}\right.
\]

There is no morphology on the verb of a relative clause that would not be found in a main clause, nor any omissions. Similarly, there is no special relativiser, that marks either of these two clauses as a subordinate clause. Only the position, overtly within the NP (as shown by its appearance between the noun and the NP-final demonstrative), that marks the relative clause as being anything other than a main clause, and the optional omission of a proclitic subject pronoun on the verb. In the following sections we shall examine what sorts of nouns may be the heads of relative clauses, and what restrictions there are for non-canonical heads.

\subsection*{8.3.1 Syntactic function of the head of a relative clause}

Any noun may be the head of a relative clause; there are no restrictions on the semantic or syntactic role of the head. There are, however, different coding patterns for locations as heads than for nouns with other semantic roles in this position. The following sentences present examples with nouns filling different syntactic roles in the relative clause as their heads. In each case the position of the head in the relative clause has been indicated in an equivalent of the relative clause, if it was functioning as a main clause on its own. This is placed following the main sentence, so that following the sentence illustrating the noun phrase with a relative clause 'the girl who made the sago yesterday' we can see the unglossed sentence 'The girl made the sago yesterday.', with the position of the subject made clear.

A head, subject of a bivalent clause
\begin{tabular}{lllll} 
Nì & pe=angku & [rC bàng & hòe & pe=tue ]=ing a
\end{tabular}\(\quad\) nì=fu. 'I saw the girl who made the sago yesterday.'
[IP Bàng pe=angku hòe pe=tue ]
\(S\) head, animate subject of a monovalent clause
\begin{tabular}{|c|c|c|c|c|}
\hline \multirow[t]{3}{*}{Ku child} & [RC bàng & te & báng ]=fue & pe \\
\hline & yesterday & 3SG.F.go & beach=that & 3SG.F.ERG \\
\hline & pe=p-ang. & & & \\
\hline \multicolumn{5}{|l|}{sago 3SG.F=3SG.F-eat} \\
\hline & child who w & o the b & yesterda & he sago.' \\
\hline
\end{tabular}
[IP Bàng \(\boldsymbol{k} \boldsymbol{u}\) te báng]
The subject of a monovalent clause behaves the same as does the subject of a bivalent clause with respect to this relative clause strategy. This is to be expected, given that they share the same morphologically and syntactically privileged position elsewhere in the verbal system, specifically the fact that they are treated alike as far as agreement marking and switch reference tracking goes. This privilege is based on the relative position of the argument in a hierarchy, rather than the semantic role it plays in the particular sentence. This assertion can be seen to be true by examining the following sentence, in which no animacy, and hence no agentivity, can be construed as applying to the \(S\) head of the relative clause. Here we have a complex relative clause formed about the head pa 'river', which is predicated by ko (í i li) 'flow (and form a pool)'; the main clause equivalent of the relative clause plus its head is shown in (31)'.

S head: inanimate subject of a monovalent clause
\[
\begin{align*}
& \begin{array}{llllll}
\text { te } & \text { pa } & {\left[\begin{array}{lll}
\text { RC } & \text { ko } & \text { ín } \\
\text { flow } & \text { i } & \text { li }], \ldots
\end{array}\right.} \\
\text { 3SG.F.go } & \text { river } & \text { be do }
\end{array}  \tag{31}\\
& \text { 3SG.F.go river flow pool be do , }
\end{align*}
\]
(31)' [ip Pa ko í ili].
'(The) river forms a pool.'
This example also shows that agentivity is not a factor in determining the eligibility of an S to function as the head of a relative clause. Examining objects, which have significantly different morphological representation, we find that as far as treatment goes in relative clauses they are not differentiated from subjects. The following example shows that the morphosyntax of the relative clause with an object head is identical to that of a relative clause with a subject head. Again, the main clause equivalent of the relative clause plus its head is shown, in (32)'.

P head, object of a bivalent clause
\begin{tabular}{|c|c|c|c|c|}
\hline Hòe & [RC bàng & mè=pi ] =ing & mong & tue \\
\hline sago & yesterday & 2SG=2SG.do=the & F.sit & 3SG.F.do \\
\hline
\end{tabular}
'Where's the sago you made yesterday?'
(32)' [Ip Bàng (mè) hòe mè=pi ].
'You made sago yesterday.'
The similarity behaviour in relative clauses extends beyond the core arguments, however, and we can see from the following sentences that morphosyntactically oblique nominals can behave the same in relativisations as do the core arguments. This is true for both unmarked
adjuncts, such as the location in (34), and overtly marked obliques, such as the instrument in (36). These two sentences also show that pre- or postverbal position does not affect the structure of the relative clause, or the nominal's eligibility to head it.

Adjunct head: goal oblique
(33) Bàme [RC bàng nì=re]=ing a bàme bápáli. village yesterday \(1 \mathrm{SG}=\mathrm{go}=\) =the village big 'The village I went to yesterday is a big village.'
[IP Bàng nì=re bàme ]
'I went to a village yesterday.'
Adjunct head: (inner) location
(34) TeMáwo bàme [rC jéng nì pe=tanghang]=ing Skou Mabo village place 1 SG 3 SG. \(\mathrm{F}=\) face \(=\) DEIC
'Skou Mabo is the village I was born in.'
[ip Nì pe=tanghang bàme ]
'I was born in the village.'
Adjunct head: (outer) location
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline Ung a & , & bàme & éng & félangro & te & & nì \(=1 \mathrm{i}\) ]. \\
\hline now & 3SG.F= & village & place & year & 3SG & dance & \(1 \mathrm{SG}=\mathrm{do}\) \\
\hline
\end{tabular} 'Now she's gone to the village that I danced at last year.'
[ip Lí nì=li bàme ]
'I danced in the village.'
Adjunct head: instrument
(36) Tanglílong [RC ró pe=w-á e tue]=wia topó. scissors cloth 3SG.F=3SG.F-cut 3SG.F.be 3SG.F.do=this blunt 'These scissors that she used to cut the cloth are blunt.'

\section*{[IP Tanglílong=pa ró pe=wá e tue ]}
'She's cutting the cloth with the scissors.'
In the relative clause involving an instrument there is no morphological clue to the fact that the head of the relative clause serves as an instrument in that clause. Only the facts that the scissors are not the (subject) argument indexed on the verb, and that a separate overt object is present, let us know that the head of the relative clause must have another role in the clause other than subject or object, and so must be an oblique. The instrumental marker =pa is absent both from the noun in the main clause, and from the relative clause (there is no resumptive marker for the instrument). The instrumental relative clause is thus identical to the locational relative clause seen in (34) and (35), and only constraints of real-world plausibility allow us to interpret 'scissors' as an instrument, and not a location.

There is an alternative relative clause construction available for locations when they serve as the head, involving the use of jéng 'place' apparently as a relativiser, initially in the relative clause. The following cleft construction shows the use of the locational relative clause with jéng; the non-relativised sentence that corresponds to the relative clause is shown as well.

Te Máwo bàme [rcjéng nì pe=tánghang].
Skou Mabo village place 1SG 3SG.F=face
'Skou Mabo is the village I was born in.'
[IP Nì pe=tanghang bàme ]
'I was born in the village.'
(In order to express the English notion of 'be born' in Skou, we are forced to encode an explicit feminine subject. There is no monovalent lexical item corresponding to the English translation, but there is a conventionalised use of an inexplicit third person singular feminine subject in this case, obviously referring to the speaker's mother. This is very similar in broad outline to the adjunct nominal predicates described in chapter 14, but without the adjunct nominal.)

An alternative coding without jéng sounds less fluent to Skou ears. With non-oblique arguments this sort of dummy head is not required in clefts, and its presence is almost a guarantor of unacceptability. The following sentence is essentially not grammatical with bà in the position indicated, and while some 'hardened informants' (those who have worked with me for longer) might judge it as acceptable most speakers will not.
\begin{tabular}{|c|c|c|c|c|}
\hline Ke=ing a & ke=bà & \(\left[_{\text {RC }}\right.\) (**' bà ) & nì & ke=ká ]. \\
\hline \multicolumn{5}{|l|}{\multirow[t]{2}{*}{3SG.NF=the 3SG.NF=person person 1SG 3SG.NF=hit 'He's the man who hit me.'}} \\
\hline & & & & \\
\hline \multicolumn{5}{|l|}{\multirow[t]{2}{*}{[ip \(\boldsymbol{K e} \boldsymbol{e}=\boldsymbol{b a ̀}(=\) ing a) nì ke=ká ]
'The man hit me.'}} \\
\hline & & & & \\
\hline
\end{tabular}

There are clearly different strategies for cleft constructions for obliques as opposed to core arguments, showing that even though they are all eligible for relativisation, there are differences between them in terms of their relativisability. The morphologically least marked relativisations are those that involve subjects, objects, and subcategorised-for obliques, while locative adjuncts require the most marking. There is a clear hierarchy of relativisability, with the least-disrupted clauses being those with objects as heads, then those with subjects, obliques, and instrumental adjuncts, and finally locational adjuncts as the most morphosyntactically disrupted participants to have as the head of a relative clause.

\subsection*{8.3.2 Pre-nominal modification: habitual action}

Some relative clauses are not so easily characterised as involving a grammatical function, but rather describe a typical or habitual function. These relative clauses appear pre-nominally. The following example exemplify these relative clauses.
(39) Ku te=ti e ti yano nì=lóe i.
child 3PL=3PL.do 3PL.be 3PL.do work 1SG=work be
'I worked as a midwife.'
Not all habitual descriptors are prenominal, as the following example shows:


This form of modification is not extremely common, and all occurrences are with stative, permanent descriptions, not punctual events. The infrequency of its occurrence, however, means that any generalisations we can draw about the restrictions on its appearance must remain tentative.

\subsection*{8.3.3 Internal relative clause}

In addition to the relative clause types described above, in which the modifying element appears post-nominally, it is also possible to form a relative clause with the head noun in situ in its place in the clause inside the relative clause. This is only possible when the head of the relative clause is an object, which appear in their normal clause-internal position. Other potentially clauseinternal elements of a sentence, such as instruments, goals or subjects, may not appear in this construction, allowing only the post-nominal construction seen in 8.3.1.

An example of an internal relative clause can be seen in (41); compare with (43), which shows the same sentence with a post-nominal relative clause. The sentence 'You made sago yesterday', with no subordinate clauses involved, is shown in (42), for comparison.

Object head of internal relative clause
\begin{tabular}{|c|c|c|c|c|c|}
\hline [RC Bàng & hòe & mè=pi ] =ing a & mong & ue & nè? \\
\hline yesterday & sago & \(2 \mathrm{SG}=2 \mathrm{SG}\).do=the & F.sit & 3SG.F.do & Q \\
\hline here's the & & made yesterday? & & & \\
\hline
\end{tabular}
[IP Bàng (mè) hòe mè=pi]
Object head of external (postnominal) relative clause


Further evidence that hòe 'sago', and not simply the whole clause, is the argument of the main clause is that the verbal agreement is with this argument. The clause above has a feminine noun heading the relative clause, but if we were to use a non-feminine noun a different agreement pattern on the main clause verbs would result, as in (44). Here we can see that, in contrast to (41), the unmarked forms of the verbs moeng 'sit' and li 'do' must be used; (45) shows that feminine inflection on these verbs is not grammatical.

Non-feminine object head
```

        [RC Bàng pa mè=b-é m-á moe poe]=ing a
        yesterday water 2SG=2SG-get 2SG-carry return 2SG.come=the
        moeng li nè?
        sit do Q
    'Where's the water you fetched yesterday?'
    ```
```

* [rC Bàng pa mè bé má moe poe] ing a
$\begin{array}{ll}\text { mong } & \text { tue } \\ \text { F.sit } & \text { nsG.F.do }\end{array}$
[IP Bàng (mè) pa mè=bé má moe poe]

```

This structure is not grammatical with arguments other than objects serving as the head of the relative clause. When demonstrably internal to the clause, such as when preceded by a time expression, a subject nominal may not be relativised in this manner.

Subject as internal head.
\begin{tabular}{|c|c|c|c|}
\hline * [RC bàng & pe=ueme & hòe & pe=tue ] =ing a \\
\hline yesterday & 3SG.F=woman & sago & 3SG.F=3SG.F.do=th \\
\hline mong tue & nè? & & \\
\hline F.sit 3SG & G.F.do Q & & \\
\hline 'Where's the & woman who ma & he & o yesterday?' \\
\hline
\end{tabular}

This sentence will be judged grammatical if the head, peueme, is simply placed preceding the relative clause, rather than internal to it, as in (48).
```

Pe=ueme [rC bàng hòe pe=tue ] =ing a mong tue nè?

```

Similarly obliques and adjuncts of all kinds may not be relativised with internal relative clauses. We can thus see that the identity of the head, in terms of the grammatical function that it bears inside the relative clause, is important in determining the possibilities for relativisationthat are available to it. The postnominal relative clause option is available to all nominals, but only objects are allowed to appear in internal relative clauses.

\subsection*{8.3.4 Headless relative clauses}

There are basically no headless relative clauses in Skou. Instead, a semantically underspecified noun must be used in sentences in which no referential noun is referred to. This is similar to the way that English uses 'one' (the running one). In this context bà is used for animates, parallelling the use of bà= with adjectives that refer to an animate noun. If the referent is not animate, then the general epistememe ya will be found. For instance, 'Get the one that I made.' would be expressed as in (49), with a pleonastic nominal filling the head-of-NP position, and not with a genuinely empty head, as seen in (50).
\[
\begin{align*}
& \text { Mè è } \quad[\mathrm{NP} \text { ya } \quad[\mathrm{RC} \text { nì=li }]=\text { ing a }] \text { mè=b-é. }  \tag{49}\\
& 2 \mathrm{SG} \quad \text { thing } 1 \mathrm{SG}=\mathrm{do}=\text { the } \quad 2 \mathrm{SG}=2 \mathrm{SG} \text {-get }
\end{align*}
\]
'Get the one that I made.'
\[
\begin{equation*}
\text { * mè [NP } \left.\left.{ }_{\mathrm{NP}} \mathrm{R}_{\mathrm{RC}} \mathrm{nì=}=\mathrm{li}\right]=\mathrm{ing} \mathrm{a}\right] \text { mè=b-é } \tag{50}
\end{equation*}
\]

When questioning a subject, however, that is animate, there is a headless option, using the question word 'who' in its clitic function. Thus, for 'I'm looking for the person who ate my sago.' there are two options. In the first option, the relative clause is headed, and follows the English quite closely in structure.

\section*{Headed relative clause}


An alternative to this is to use the interrogative clitic with a headless relative clause, seen in (52), and to allow the epistemic classificatory functions of the interrogative to specify the semantic category of the head.

Interrogative proclitic
\[
\begin{align*}
& \text { Nì [NP Ø [RC hòe-nì=ne bá=k-ang ] =ing a ] }  \tag{52}\\
& \text { 1SG sago-1SG.GEN=1SG.DAT who=3SG.NF-eat=the } \\
& \text { nì=yú i li. } \\
& 1 \mathrm{SG}=\text { search be do } \\
& \text { 'I'm looking for the one who ate my sago.' }
\end{align*}
\]

The absence of any interrogative clitic for non-animate referents means that there is no morphological means to code any information about their class on the verb, and so a headless
relative clause construction is not available for these nouns. The following sentences show that a normally headed relative clause is acceptable, (53), as is a relative clause with a dummy head, (54). A relative clause with no nominal head, however, is not grammatical. This is true whether it is coded with a normal subject proclitic, as shown in (55), and definitely so if we attempt to cliticise ya 'what' onto the verb, in (56). In the first case the clause suffers from a lack of reference, and in the second it is ungrammatical because there is no clitic form (the best approximation is ya=) that can fill the subject proclitic position.
\[
\begin{align*}
& \text { Fu [RC nì } \quad \text { ke=ká ]=ing a bápáli. }  \tag{53}\\
& \text { rain } \begin{array}{l}
\text { 1SG } \\
\text { 3SG.NF-hit=the } \\
\text { 'The rain which soaked me was big.' }
\end{array} \\
& \text { big }
\end{align*}
\]
\[
\begin{align*}
& \text { Ya [RC nì ke=ká ]=ing a bápáli. }  \tag{54}\\
& \text { thing 1SG 3SG.NF-hit=the } \text { 1Sig } \\
& \text { 'The thing that soaked me was big.' }
\end{align*}
\]
\[
\begin{equation*}
 \tag{55}
\end{equation*}
\]

This difference in relativisation strategies reflects another asymmetry between the two major noun categories, the animate and inanimate, which cross-cuts the feminine vs. non-feminine gender distinction (see Chapter 10). While it is possible for an animate noun to appear in a genuinely headless relative clause, it must either leave have some semantically loose 'filler' head, or else have an interrogative pronoun appear in its place as an agreement marker inside the relative clause. This means that the second strategy is an option available only to subjects.
\[
\begin{align*}
& \text { Rópu=eng nì=wé leng te-te }  \tag{57}\\
& \text { book=the 1SG-get.F give 3SG.F.go-RED } \\
& \text { ke=angku-nì=ne } \quad \text { [rC } \mathrm{ke}=1 \mathrm{i} \quad \text { i li Tembagapura ]. } \\
& \text { 3SG.NF=child-1SG.GEN=1SG.DAT 3SG.NF=do be do Tembagapura } \\
& \text { 'I'm sending this book to my child who's in Tembagapura.' } \\
& \text { (here [ }\left[\begin{array}{c}
\text { ] is an extremely reduced form of =ing a 'the') }
\end{array}\right.
\end{align*}
\]

We must thus distinguish the following different grammatical categories in a structural account of the variation found in relative clauses:
- location
- object
- animate

The following section discusses the occurrence of relatives clauses modifying nouns that are modified by other means.

\subsection*{8.3.5 Relative clauses and other modifiers in the same NP}

When a relative clause and another non-demonstrative modifier both appear as modifiers in the same NP, then the order of these elements is fixed. This constructions is found only rarely, and is not preferred as a means of supplying information about the nominal, but it nonetheless possible. If there is a demonstrative it must, of course, be final in the NP, following the
nominal and all its modifiers, but the relative clause must also be final in a string of modifiers. In the following sentence we can see that both the adjective bápáli 'big' and the relative clause lópa ál ke li ko moeng both modify pá 'house', and the order of these elements is fixed; some of the possible ungrammatical orderings of the elements of the NP are shown in (59) - (61), contrasting with the single grammatical sequence shown in (58).
\[
\begin{align*}
& \text { Nì=re-re }  \tag{58}\\
& \text { 1SG=go-RED } \\
& \text { [np pá bápáli [rClópa ál } \quad k e=\| i=k o \quad \text { moeng ] =fue a ]. } \\
& \text { house big earlier father 3SG.NF=do=OBV sit that }
\end{align*}
\]
```

* pá fue lópa ál ke li ko moeng

```
* pá bápáli lópa ái ke li ko moeng
* pá lópa ái ke li ko moeng bápáli fue a

Even with shorter relative clauses the same conditions hold, showing that this is not simply a prosodic constraint based on the moraic weight of the modifiers.

\subsection*{8.3.6 Summary: Relative clauses in Skou}

We have seen that there is a variety of different ways to form relative clauses in Skou, but that not all relative clauses may be formed with every nominal. The restrictions on relative clause formation are partly dependent on the semantic characterisation of the head of the relative clause, partly dependent on the semantic characterisation that the relative clause gives to the head noun, partly dependent on the function that nominal plays inside the relative clause (locational obliques require a complementiser jéng), and also partly dependent on the environment inside the NP in which the relative clause is found. The internal relative clause strategy is the most restricted, appearing only with heads that bear the grammatical function 'object' in the relative clause.
```

xxxxxxx

```

\subsection*{8.4 Compounds}

There are a number of what might be thought of as 'lexicalised' expressions. In most cases these compounds are best thought of as phrasal compounds, and not lexical ones, in that they do not have the structure of a single word, but rather that of a relative clause(-like) unit. For instance, in (99) there is no evidence for the sort of phonological coherence that is associated with single words. On the other hand, there is no demonstrative to close the relative clause, which we would expect in purely compositional syntactically-formed relative clauses.
\[
\left[\begin{array}{llll}
{[\mathrm{NP} \varnothing[\mathrm{RC}} & \text { ríl tópo } & \text { rue } & \text { bi }] \tag{99}
\end{array}\right]
\]

The following example shows a compound used as part of an adjunct nominal construction. Further examples of complex adjunct nominal constructions not made up of lexicalised compounds can be found in chapter 14.

XXXXXXXXXXXXX
\[
\begin{array}{ll}
{[\mathrm{N}+\mathrm{ya} \quad \text { po ] }}  \tag{99}\\
\text { thing } \\
\text { 'write' carve } & \text { ke=li } \\
\text { 3SG. } \mathrm{NF}=\mathrm{do}
\end{array}
\]
(99)'
```

[n+ ya po ]
thing carve
'writing'

```

\subsection*{8.5 Special modification: quantifiers}

Most modifiers can grammatically co-occur inside the same NP, modifying the same nominal head, though occurrences of this happening in non-elicited texts are rare. There are exceptions, however: quantifiers hìng 'other' and fátà 'all' cannot occur with any other modification in the NP. To illustrate this, although both (99) and (99) are grammatical, showing a quantifier or an adjective modifying a noun, it is not possible for the two to appear in the same NP.
(99) Nì=re-re pá hìng li. 1SG=go-RED house other do 'I want to go to another house.'
\[
\begin{align*}
& \text { Nì=re-re pá bápáli li. }  \tag{99}\\
& \text { 1SG=go-RED house big } \\
& \text { 'I want to go to a big house.' }
\end{align*}
\]
\[
\begin{array}{lllll}
\text { * nì=re-re } & \text { pá } & \text { hìng } & \text { bápáli } & \text { li. } \\
\text { 1SG=go-RED } & \text { house } & \text { other } & \text { big } & \text { do }  \tag{99}\\
\text { * nì=re-re } & \text { pá } & \text { bápáli } & \text { hìng } & \text { li. } \\
\text { 1SG=go-RED } & \text { house big } & \text { other } & \text { do }
\end{array}
\]

The quantifiers fátà behaves the same as hìng, in that it cannot appear in an NP with any other modifiers. Nawo , on the other hand, can cooccur with other modifiers in the same NP, as in (99).
Nì=re-re pá bápáli nawò li.

1SG=go-RED house big many do
'I want to go to many big houses.'
Another major difference between fátà and nawò is the ability of fátà to appear in a position external to the NP that it quantifiers. This is discussed in 13.3.2.1.

\subsection*{8.6 Predicate nominals}

When a nominal is predicative, there is no change to the structure of the NP. This can be judged by comparing the following pairs of sentences, showing referential and predicative uses of the same (or nearly same) NPs.

Plain nominal: argument and predicate
(99) Naké boeboe ke=li. dog growl 3SG.NF=do ‘The dog growled.'
(99) Ke=inga naké.

3SG.NF=the dog
'That one's a dog.'
Modified noun: argument and predicate
(99) Naké máki=ing ingéong ke=yú-yú i li. dog big=DEIC cat 3SG.NF=chase-RED be do 'That big dog is chasing a cat.'
(99) Nì kóeng ke=k-ang=ing a naké máki=fue. 1SG tooth 3SG.NF=3SG.NF-eat=the dog big=that 'The one that bit me was that big dog.'

The only differences that can arise come about when the nominal is used with an inchoative sense, in which case the verb li 'do' is used as well as the nominal. \({ }^{49}\) Compare the following clauses, both with a nominal predicate. In the first the predicate is stative, and there is no verbal element in the clause. In the second the semantics of the state portion of the predicate is unchanged, but with an inchoative sense, and so a verb must be used.
```

(99) Ke kurù.
3SG.NF teacher
'He's a teacher.'
(99) Ke kurù ke=li.
3SG.NF teacher 3SG.NF=do
'He's (already) become a teacher.' (= 'He's a teacher.')

```

When used with a verb, and this inchoative sense, the clause may show all the tense, aspect and mood alternations that are found with verbal clauses. Compare the following possibilities with a purely nominal predicate and with a light verb in the clause as well.

Table 133. TAM coding with nominal predicates
\begin{tabular}{|c|c|c|c|c|}
\hline & Nominal & TAM & Nominal + verb & Sense with verbal auxiliary: \\
\hline [1] & Ke kurù & past & K e kurù ke=li & 'He had been a teacher.' \\
\hline [2] & Ke kurù & habitual & K e kurù ke=li & 'He has become a teacher.' \\
\hline [1] & Ke kurù (verbal) & \begin{tabular}{l}
intent \\
desire
\end{tabular} & \begin{tabular}{l}
Ke kurù ke=li-li \\
Ke kurù ke=li ili
\end{tabular} & \begin{tabular}{l}
'He will become a teacher.' \\
'He wants to become a teacher.'
\end{tabular} \\
\hline [2] & Ke kurù (verbal) & continuous perfective & Ke kurù ke=li-li li K e kurù ke=li loeng & 'He is becoming a teacher.' 'He had already become a teacher.' \\
\hline
\end{tabular}

Code for the readings of the nominal sentences in the left-hand column above:
[1]: 'He was a teacher.'
[2]: 'He is a teacher'

\footnotetext{
49 This is identical to the use of the same light verb with inchoative adjectives, as described in 5.3 and 7.2.1.
}

Further details about the morphosyntax of predicative nominals can be found in 17.1.

\subsection*{8.7 Place names}

There are many named places in the Skou world, especially if it lies on the coast. This means that, in addition to the developed system of directionals and direction-indicating verbs, a person can accurately indicate a direction of travel or the relative location of an event simply by naming the place.

The place names are listed here as part of the description of NPs since their external distribution parallels that of NPs, with whatever restrictions that apply to the positioning and coordination of other NPs applying equally well to place names. They deserve special treatment in that they are restricted in terms of the modification they can receive, appearing only with deictic markers and demonstratives, and not with other typical NP modifiers such as have been described in this chapter, nor with possessive modification. They are, then, elements that can replace entire NPs, but not DPs, since they too are open to demonstrative modification.

From Tangwáto in the west to Pa ílong in the east the land is all owned by Skou people, but beyond that there are names for many broad places that are culturally relevant to the Skou people in both directions, especially where there are social ties through marriage. The following list, far from exhaustive, shows in indication of the Place name detail and naming forms used by the Skou people.

Table 134. Place names in the Skou area (west to east)
\begin{tabular}{|c|c|c|c|}
\hline Location & Skou & Description of location & Cultural notes \\
\hline \multirow[t]{4}{*}{Far west} & Te Bà Lea & Biak & there were strong trade connections between Biak and the Humboldt Bay area \\
\hline & Te Bà Lato & Serui, Yapen & many mythological references \\
\hline & Te Lángfa & Tanah Merah, Tabla & \\
\hline & Te Lùng & Ormu & marriage ties \\
\hline \multirow[t]{8}{*}{Immediate west} & Te Purà & Kayu Batu village in Jayapura bay & marriage ties \\
\hline & Te M élong & Kayu Pulau village in Jayapura bay & marriage ties \\
\hline & Nofé & Jayapura valley & \\
\hline & Te Húngfa & Sentani & both the ethnic group and now also the airport town \\
\hline & À \({ }^{\text {bi }}\) & Abepura valley & \\
\hline & Te Téme & Nafri & traditionally relations were not good with the Nafri \\
\hline & TePa & Tobati & strong marriage ties \\
\hline & Te Lóngpa & Enggros village & many marriages with this village \\
\hline Skou lands & Fàngri & beach just west of Tanjung Jar at the east end of Humboldt Bay & western edge of Skou land \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline & Tangwáto & Cape that marks the east boundary of Humboldt Bay & Skou Yambe land \\
\hline & Pa úerong & stream flowing to the sea from the Tanjung Jar cliffs & \\
\hline & Tangráme & closer cliffs of Tanjung Jar & \\
\hline & Pa bípa & river at Skou Yambe & \\
\hline & Pa rang & creek west of Skou Yambe & \\
\hline & Te Tángpe & Skou Yambe & most populous Skou village \\
\hline & Te M áwo & Skou Mabo & most prestigous Skou village \\
\hline & Pa pípa & river at the eastern end of Skou Mabo & \\
\hline & Nàho & beach between Skou Mabo and Skou Sai & \\
\hline & Léli & beach immediately seaward of Skou Sai & \\
\hline & Te Bapúbí & Skou Sai & most eastward of the three villages; smallest in population \\
\hline & Pa púbí & river at Skou Sai & \\
\hline & Pa ílong & Tami river & southern and eastern boundary of Skou land \\
\hline Hinterland & Te Húele & Sangke clan (< Nyao Nemo) & Moved to Nyao-Kono in PNG in 1969 \\
\hline & Te Nóemo & Nyao Nemo (on the Tami River, now in PNG) & A Nyao group \\
\hline & Te Bà Kófo & Sko Kofo (close to the modern border, now in PNG) & One of the Nyao groups \\
\hline & Te Pòeng & Skofro (the old village for modern Tapos, in PNG) & Moved to PNG in the early 1960s \\
\hline & Jáwung & Nyao (now in PNG) & General name for the ethnic group in three villages \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline East & Te Óeti & Wutung & many marriage ties, especially with Skou Sai \\
\hline & F áwi báng & beach just to the east of Wutung village & \\
\hline & Te Yákó & Yako & \\
\hline & Te M òru & Moso / Musu & Nyao people who moved to the coast from the hills in the 1950s; linguistically assimilating to Wutung \\
\hline & Te Lú & Waromo & most populous village on the Vanimo coast \\
\hline & Te Yong & Vanimo, Lido & politically dominant village in the Vanimo area \\
\hline & M áke & \begin{tabular}{l}
Vanimo headland, (modern) \\
Vanimo town
\end{tabular} & Same political and linguistic ties as Lido, traditionally \\
\hline
\end{tabular}

As stated above, the list of names given in table 134xx is not intended to be exhaustive. It is simply a sample of the kind of detail that the surrounding area is known in, and could be expanded manyfold for the areas listed as Skou lands, particularly regarding the number of terminological differences that are made along the coast near Tangwáto, where in some areas the name designating the beach can change every ten or twenty metres, depending on the degree of detail that a speaker feels is necessary.

\subsection*{8.8 Summary of noun phrase syntax}

As we have seen, NP syntax in Skou is not overly complex. There is little, if any, variation within a clause in terms of the relative order of its elements, and the only morphological marking that is found is for possession (see the next chapter): there are no special markers of adjunction, no linkers, no markers of subordination.

The only case marking found on core nominals involves the optional ergative pronoun, formed by means of the third person pronominals (see chapter 6). The pronominal clitics are also used to specify gender on the head noun, in some cases optionally, in some cases obligatorily; this is discussed in greater detail in chapter 10. Other morphological marking that can be obligatory is the marking of possession on the small set of 'inalienable' lexemes, detailed in the following chapter.

\section*{9 Possession}

This chapter deals with the marking of possession inside the NP - the translation equivalents of 'his house' and similar constructions. Since phrasal possession ('He has a house.') uses the same morphosyntax, and since Skou does not have a lexical item translating 'have', it is also dealt with here, following the account of phrasal possession. Finally, various forms of external possession are found, and they are also documented.

\subsection*{9.1 Structure of possession}

Possession is a head-marking construction in Skou, as would be predicted by the overall typology of the language. A possessive phrase has the possessor, if nominal, preceding the possessum, and marking on the possessum showing agreement with the possessor with special genitive and dative morphemes. This is shown in (1).
(1) ( NP \(\left._{\text {POSSESSOR }}\right)_{\text {pers, num, gdr }} \quad \mathrm{NP}_{\text {POSSESSUM }}-\) GEN \(_{\text {pers:num:gdr }}=\) DAT \(_{\text {pers:num:gdr }}\)

When the possessor is nominal, it must appear in the pre-head position. When the possessor is pronominal this is optional, but still preferred. An example of this sort of possession is shown in (2). Here the head noun peangku 'daughter' appears suffixed with the possessive string -ké=ke, which marks peangku as possessed, and indicates the person, number and gender of the possessor. The nominal possessor appears pre-nominally, and is not marked in any way.
(2) Theo pe=angku-ké=ke

Theo 3SG.F=child-3SG.NF.GEN=3SG.NF.DAT
'Theo's daughter'
A pronominal possessor may optionally be present in the pre-head position, but even if this is the case the possessive morphology is still obligatorily suffixed to the possessum:
(ke) pe=angku-ké=ke
3SG.NF 3SG.F=child-3SG.NF.GEN=3SG.NF.DAT
'his daughter'
The following section details more specific facts of possessive constructions depending on whether the possessum is an alienable or inalienable noun.

\subsection*{9.2 Alienable possession}

Alienable nouns are those, the majority of nominals in the languages, which can appear without any indication of possession. When they are possessed the genitive suffixation and dative
clitics, used together, is sufficient morphology to indicate possession. This is generally adequate when the possessor is pronominal, though more often, especially if there is some degree of emphasis on the identity nominal, a free pronoun indexing the possessor is also used preceding the possessed nominal as well.
```

pá-pè=pe
house-3SG.F.GEN=3SG.F.DAT
'her house'

```
```

pe pá-pè=pe

```
pe pá-pè=pe
3SG.F house-3SG.F.GEN=3SG.F.DAT
'her house' / 'her house'
```

Nominal possession follows this same morphosyntactic pattern, with the possessor preceding the possessum, which is then affixed with genitive and dative suffixes. In the following example te= specifies 'children', not Theo.
(6) Theo te=angku-ké=ke

Theo 3PL=child-3SG.NF.GEN=3SG.NF.DAT
'Theo's children'
Stacked pronominal marking sequences on the one nominal can arise when the possessor is specified with a gender marking pronoun, and the NP is summarised with a pronoun. The possessive structure, however, is identical. Compare the above sentences with the superficially more complicated one below, and then examine the structures representing them.

```
Pe=ueme te=yá-pe-pè=pe te
3SG.F=woman 3PL=sister-3SG.F.DAT-3SG.F.GEN=3SG.F.DAT 3PL
    nì te=fi.
    1SG 3PL=see.3PL
    'The woman's sisters saw me.'
```

The most basic possessive structure is simply a noun affixed to show the pronominal features of the possessor. This basic structure can be expanded, seen in both (5)' and (8), to include a pre-nominal possessor.
(4)' [[ [N-GEN=DAT] ]
(5)' [[POSS'R [N-GEN=DAT] ]

Structure of the possessive constructions in (4) - (5)

(8)' [[POSS'R [N-GEN=DAT]]

Structure of the possessive constructions in (6)
(6)'


The phrase seen in example (7) is cast in the same pattern, though exigencies of clausal syntax require there to be more overt markers of pronominal information. The possessor noun itself is specified with a pronominal element, as is the possessum. The possessum is inalienable (see 9.3), and so takes triple marking to show agreement with the possessor, and the whole NP peueme te yá pe pè pe is summarised with the 3PL pronoun te, which also appears as an agreement clitic on the verb.
(7)' [[POSS'R [N-GEN=DAT] ] PRO SUMMARY] [PRO] CLITIC=V

Structure of the NP in (7)
(9)


Crucially, the appearance of multiple pronouns does not necessarily mark iterative possession, although initially that might be the impression gained. Rather, the excess of pronouns in the NP is simply another sign of the multiple uses to which pronouns are being put in Skou, grammaticalising in this phrase as markers of possession distinguishing alienable and inalienable - see the following section), as a specifier of the gender of the noun, and as a case marker for the NP as a whole. A genuine case of iterativity in possession marking is found with certain inalienable nouns, described in the following section.

### 9.3 Inalienable possession

A small set of nouns must be analysed as appearing in a construction for possession that does not conform to the description provided in the preceding sections. An example is that seen in (10).

```
(10) yá-pe-pè=pe
    sister-3SG.F.DAT-3SG.F.GEN=3SG.F.DAT
    'her sister'
(10)' * yá-pè=pe
    sister-3SG.F.GEN=3SG.F.DAT
    'her sister'
```

The morphosyntactic points by which these inalienable possessive constructions differ from 'normal' alienable possessive constructions are:

- the nominal roots cannot occur without the dative pronoun being suffixed on them;
- to indicate possession these affixed stems additionally take the normal suffixation for genitive and dative, just as is found on all possessed nouns
Because the nouns that show this sort of behaviour are mainly kinterms, and so high on the (cross-linguistically definable) scale of inalienable to alienable possession, it seems justified to describe these nouns as being inalienably possessed. Although it is true that most of the known
inalienable nouns are kinterms the converse, the proposition that kinterms are mainly inalienable, is not sustainable. The list of known inalienable nouns is shown in table 135xx, where they are shown with first person singular or second person singular dative marking on the nominal root.

Table 135. Inalienably possessed nouns

| bápá(ne) | 'friend' |
| :--- | :--- |
| è(ne) | 'wife, daughter in law' |
| í(ne) | 'father in law, son in law' |
| là(ne) | 'mother in law' |
| páng(ne) | 'husband' |
| tà(ne) | 'daughter in law' |
| yá(ne) | 'sister' |
| yu(ne) | 'brother' |
| héng(me) | '(someone else's) brother/sister in law' |
| má(me) | '(someone else's) mother' |
| re(me) | '(someone else's) father' |
| yaramenà(ne) | 'song' |

The list of kinterm nouns that show this marking strategy does not form a discrete semantic category. For instance, although má(me) 'mother' is inalienably possessed, ánì 'mother (general/speaker's)' is not, as can be judged by the lack of dative marking inside the genitive suffix in (11)b, and the unacceptability of such marking in (12)b.
a. má-mé-mè=me
mother-2SG.DAT-2SG.GEN=2SG.DAT
'your mother'
b. ánì-pè-pe
mother-3SG.F.GEN=3SG.F.DAT
'her mother'
(This word is realised with the pitch contour [-- ${ }^{-}$], due to regular tone sandhi operations - see 2.3.1)

$$
\begin{align*}
& \text { a. * má-mè=me }  \tag{12}\\
& \text { b. * ánì-pe-pè=pe }
\end{align*}
$$

The final syllable in bápá(ne) appears to be grammaticalising onto the root, and losing its function as an indicator of first person singular dative. For a first-person singular possessor, the only grammatical coding option is the predictable one that can be seen in (13). ${ }^{50}$

```
bápá-ne-nì=ne
friend-1SG.DAT-1SG.GEN=1SG.DAT
'my friend'
```

For a second person possessor (or any other possessor, though it is only illustrated here for second person singular), however, there are two grammatical coding options: one predictably

[^21]replaces the -ne dative marker with the second person dative, and then adds the possessive marking cluster - mè $=m e-2$ SG.GEN $=2$ SG.DAT, as would be expected for any second person singular possession. This is shown in (14)a.

```
a. bápá-me-mè=me
    friend-2SG.DAT-2SG.GEN=2SG.DAT
    'your friend'
```

The second option for coding a second person singular possessor retains the -ne in place as a suffix that must now be interpreted simply as marking the word as belonging to the class of inalienable roots, and this complex stem is then followed by the possessive marking cluster specifying the pronominal features of the intended possessor.
b. bápá(ne)-mè=me
friend(INAL)-2SG.GEN=2SG.DAT
'your friend'
This apparent semantic bleaching of the internal dative morpheme is not consistently accepted by speakers as grammatical, but the following generalisations do apply:

- bleaching (and the subsequent 'mismatch' or pronominal features in a possessed nominal) is found most commonly with the roots bápá(ne) 'friend' and yaramenà(ne) 'song';
- bleaching has occasionally been observed (or a speaker has once or twice judged it grammatical) with the roots yá(ne) 'sister' and yu(ne) 'brother';
- bleaching has never been observed (or judged grammatical) with the root è(ne) in the sense of 'wife', but has been heard when è(ne) is used to mean 'daughter in law';
- bleaching has never been observed (or judged grammatical) with the roots í(ne) 'father in law, son in law', là(ne) 'mother in law', páng(ne) 'husband', tà(ne) 'daughter in law';
- bleaching has never been observed (or judged grammatical) with the roots that cannot be possessed by a first person singular possessor, namely héng(me) '(someone else's) brother/sister in law', má(me) '(someone else's) mother', re(me) '(someone else's) father'.
This indicates that the process of grammaticalisation is being applied not to the inalienable construction as a whole, but to the 1SG.DAT suffix, and then more commonly to those kinterm roots that are less closely associated (in terms of generational or marriage links) to the speaker, or to non-kinterm roots. This might be seen as providing evidence for a scale of ranking of the perceived 'inalienability' of the different roots, in terms of their resistance to bleaching and the retention of the -ne marker as a meaningful and productively analysable unit. On the other hand one might interpret these data as suggesting that the category of inalienability is starting to display its own unique morphology, the inalienable suffix -ne, that is not simply parasitic on the existing possessive morphology already present when marking alienable possession. Under either interpretation we do have strong evidence that there is differential treatment of kinterms depending on whether they are in a vertical relationship to the speaker, or a horizontal one.

It is worth noting that some of these nominals which behave as inalienable nouns are phonologically identical, both segmentally and suprasegmentally, to another noun which
behaves as an alienable one. Some examples of inalienable nouns that have an alienable noun homophone include:

Table 136. Alienable - inalienable homophones

| Alienable sense | Inalienable sense |  |  |
| :---: | :---: | :---: | :---: |
| è | 'ripe, cooked (one)' | è(ne) | 'wife, daughter in law' |
| í | 'snake' | í(ne) | 'father in law, son in law' |
| là | 'prawn' | là ne ) | 'mother in law' |
| páng | 'bedbug' | páng(ne) | 'husband' |
| tà | 'bow' | tà (ne) | 'daughter in law' |
| yá | 'grass' | yá(ne) | 'sister' |
| yu | 'cousin' | yu(ne) | 'brother' |
| héng | 'yawn' | héng(me) | '(someone else's) brother/sister in law' |

While chance resemblance cannot be ruled out in a set of monosyllables from a language with only 413 possible syllables (see 2.4), it is also likely that the inalienable senses of at least some of these homophones, which all involve kinship, are symbolic extensions from the common noun uses of the words. For example, conceiving of 'brother' as an inalienable form of 'cousin' is not a problematic extension, but the leap between, say, 'prawn' and 'mother in law' is a more abstract one. It is clear that a more detailed ethnographic account of the Skou culture and symbology is needed, before we can state with certainty that the inalienable kin terms are all extensions of commonplace nouns, but from what is known of the symbology and beliefs of the Skou, it is not entirely unlikely. The fact that there are necessarily a large number of homophones in Skou (see 2.4), due to the highly constrained phonotactics of the language and a tendency for monosyllabic roots, means that the possibility of chance resemblance cannot be ruled out. The obligatory dative morpheme on the inalienably possessed nominal makes disambiguation of the two senses of a lexeme unproblematic.

In addition to these notes on inalienability, showing that there is a set of nominals that mark possession in more than the usual manner, there are morphosyntactic environments in which other complications in possessive marking arise, either specifying a different style of marking (pre-head rather than post-head), or apparent doubling of the entire suffix+clitic sequence.

### 9.4 Unusual forms of possession

The preceding sections described the morphosyntactic forms of 'normal' possessive constructions in Skou. In addition to these, involving alienable and inalienable variants, there are several other ways in which possession can be morphologically realised, detailed in the following sections.

### 9.4.1 Reduced possession

When a possessor is itself possessed, such as in the English sentence 'my mother's sister', then the ultimate possessum ('sister' in the English phrase above) only takes simple possession, not
the full set of genitive and then dative marking. Note the usual possessive sequences in the following two simple possessive phrases:
(nì) ánì-nì=ne
1SG mother-1SG.GEN=1SG.DAT
'my mother'
(16) (pe) pe=bafàng-pè=pe

3SG.F 3SG.F=younger.sibling-3SG.F.GEN=3SG.F.DAT
'her younger sister'
When these two phrases are combined to form 'my mother's younger sister' the only possessive morphology on pe=bafàng is the genitive - pè; the dative =pe does not appear:
(nì) ánì-nì=ne pe=bafàng-pè
1SG mother-1SG.GEN=1SG.DAT 3SG.F=younger.sibling-3SG.F.GEN
'my mother's younger sister'
(18) * (nì) ánì-nì=ne pe=bafàng-pè=pe

This reduced possession does not exclude the possibility of a summarising pronoun at the end of the phrase, if it is in the appropriate syntactic role to receive one. This is shown in (19).

| (Nì) ánì-nì=ne | pe=bafàng-pè | pe |
| :--- | :--- | :--- |
| 1SG mother-1SG.GEN=1SG.DAT | 3SG.F=younger.sibling-3SG.F.GEN | 3SG.F.ERG |
| ibábúeli $\quad$ pe=fu. |  |  |
| black.wasp(sp.) $\quad$ 3SG.F=see.F |  |  |
| 'My mother's younger sister saw a wasp.' |  |  |

The only cases where it is normal to have full genitive + dative coding for the possessor on a noun when the possessor itself is possessed is when the final possessum is a body part of the intermediate possessor. Compare xxxxxx

### 9.4.2 D ouble possessive marking

While the suffixal case may be reduced in the case of embedded possession within possession, there is another instance in which the marking for possession is apparently doubled. Examine the possessive marking genitive+dative morphemes in the following sentence:
(20) Ke te=táng hòe-tè ke=híte e

3SG.NF 3PL=bird sago-3PL.GEN 3SG.NF=boil cooked
ke=bahúe-ké=ke-ké=ke
3SG.NF=elder.sibling-3SG.NF.GEN=3SG.NF.DAT-3SG.NF.GEN=3SG.NF.DAT
i li pá.
be do pot
'He's cooking the rice in a pot for his big brother.'
Examined simplistically, this sentence has the templatic structure shown in (20)' (see 3.13 for more details and argumentation).

$$
\text { (20)' } \mathrm{S} \rightarrow \mathrm{NP}_{\text {SUBJ }} \quad \mathrm{NP}_{\text {OBJ }} \quad \mathrm{V} \quad \text { ADJ }_{\text {RESULT }} \quad \mathrm{NP}_{\text {BEN }} \quad \text { AUX } \quad \mathrm{NP}_{\text {LOC }}
$$

Most notably, the nominal ke=bàhúe-ké=ke-ké=ke 'his big brother' appears to be doubly marked for possession, with two sets of genitive+dative markers. It is, in fact, only possessed once, but the possessive marking collocation appears a second time in response to the
beneficiary role that the NP plays in the sentence. Changing 'brother' with 'sister' (effected simply by swapping the gender on the specifying pronoun), the sentence is as follows, with different sets of genitive and dative markers for different functions:
Ke te=táng hòe-tè ke=híte e e
3SG.NF 3PL=bird sago-3PL.GEN 3SG.NF=boil cooked
pe=bahúe-ké=ke-pè=pe
3SG.F=elder.sibling-3SG.NF. GEN=3SG.NF.DAT-3SG.F.GEN=3SG.F.DAT
i li pá.
be do pot
'He's cooking the rice in a pot for his big sister.'

This time we can see that the first genitive sequence, -ké=ke, marks the possessor of the nominal, but that the second sequence -pè=pe, with feminine pronominals, does not agree with the possessor, but rather with the beneficiary in the sentence. The role of beneficiary is doubly marked in this example with both postverbal position, the normal place for obliques, and with genitive marking. The internal structure of the beneficiary nominal phrase from (21) is shown in (22).


Without a beneficiary, the sentence in (21) would be (23). The linear order of the components is identical, except for the omission of pe bàhúe ké ke pè pe following the main verb.
(23) Ke te=táng hòe-tè ke=híte e
3SG.NF 3PL=canoe sago-3PL.GEN 3SG.NF=boil cooked
i li pá.
be do pot
'He's cooking the rice in a pot.'
The form of the benefactive marking string orfgenitive and dative morphemes is identical to a string of genitive and dative morphemes marking possession; the only difference between the two observed functions is that there is no 'inalienable beneficiary' construction, by analogy with the inalienably possessed nouns which appear with an extra dative morpheme.

### 9.4.3 Apparent mis-matches in possessive marking

Possession sometimes marks a pronominal category on the head noun that is not matched by the pre-nominal possessor. For instance, we would expect either of the following phrases, in which the prenominal possessor, either nominal or pronominal, is matched by the possessive
morphology that follows the noun. In the first example the male possessor is indexed on the head noun by third person singular non-feminine pronominal morphology, and in the second case we can see that the pronominal morphology matches the pre-nominal possessor pronoun in all respects.

```
ái tang-ké=ke
father canoe-3SG.NF.GEN=3SG.NF.DAT
'father's canoe'
mè tang-mè=me
father canoe-2SG.GEN=2SG.DAT
'your canoe'
```

In addition to this pattern, we can also find cases such as the following in which the prenominal possessor is indexed on the head noun, but with not with the set of possessive markers that we would expect, based on the lexical features associated with the prenominal possessor.
ál tang-mè=me
father canoe-2SG.GEN=2SG.DAT
'your canoe, father'
The motivation behind the use of the second person singular on tang is the fact that ál, and a limited set of other kinterms, can be used as polite referring expressions. In (26) we have an example of a phrase that would be uttered when talking to a man that the speaker wished to show respect for; the use of ál shows the respect, but the agreement on the noun tang is for the real-world second person singular, and so those bound morphemes appear.

### 9.5 Unusual Possessive strategies

There are two forms of morphological possession that go beyond the description given in the sections above, either by presenting a different sort of NP-internal morphology, or by marking the possessive relationship external to the noun phrase. In both cases the possessum must be in a body part relationship to the possessor, and must be either the object of the sentence or the affected body part of a predicate.

### 9.5.1 Specified possession

The first involves only first or second person possessors of objects, and takes the form of a specifying pronoun on the noun phrase, rather than a possessor. The specifying possession construction is seen below.

$$
\begin{align*}
& \text { Naké nì=lánghùe=wi a kóeng ke=ká. }  \tag{27}\\
& \text { dog 1SG=calf=this tooth 3SG.NF=bite } \\
& \text { ‘The dog bit me in the calf here.' }
\end{align*}
$$

Constituency tests, such as the placement of an instrumental phrase in the clause, show that we cannot analyse clauses of this type as involving two appositional NPs, the possessor (here ni) and a separate NP containing the possessum (here lánghùe). The two nominals must be analysed as one phrasal unit in the clause, and the simplest analysis available is one that uses the specifying position in the NP, established in 8.2.

This construction differs to that found in normal possession, in which genitive and dative markers follow the noun, as is seen in the following example:

| Nì | lánghùe-nì=ne | iri. |
| :--- | :--- | :--- |
| 1SG | calf-1SG.GEN=1SG.DAT | cramp |
| 'My calf's cramping up.' |  |  |

The two different structures can be modelled as follows. The simple possession seen in (28) takes the form of a possessor NP (optional for pronominal possession) preceding a possessum which agrees with it by means of a combination of suffix and clitic, as described in sections 8.2 - 8.4. The structure of the possessed NP in (28) is given below in (28)'.


Specified possession, on the other hand, applies to the word, as a simple word-level clitic. The object NP in (27) above is shown here as (27)'. Note the different structural positions of the pre-nominal possessing pronoun in the two examples.
(27)'


Although the specifying possession pronoun set is not the same as the set that is used to mark agreement on verbs, shown by the failure of the vowel in third person or plural representative of this clitic set to reduce to schwa (see 6.3), the function and position is very similar.

Compare the specifying clitic in (27) with the following examples, which show that the clitic is part of the specification of the word, not of the phrase:
a. ke=angku
3SG.NF=child 'boy'
b. pe=angku
3SG.F=child 'girl'

More details of this construction can be found in 6.3.2. Although these examples are by themselves ambiguous as to the scope of the proclitic pronoun, the fact that the gender-marked pronoun specifies only the noun, and not the whole phrase, is apparent in the following example, in which the scope of the pronoun can only be the noun, not the phrase:

[^22]Here it is clear that only the noun immediately following the first $\mathrm{ke}=$ is specified as nonfeminine, not the whole phrase or, indeed, the head of that phrase, è-ke. These bracketings are shown in (31)'.
(31)' [clitic-inflected word $K e=[$ [affixed stem [rootangku]-nì]=ne] [affixed stem [root èj-ke ]]

In addition to these strategies that go beyond the'normal' means of marking possession in Skou there are also various constructions that functionally indicate possession without necessarily employing any of the genitive or dative paradigms that have been described above. What these other constructions do share in common is that in all cases there is some indication of the possessor in a position external to the possessed NP, hence the term external possession.

### 9.5.2 External Possession

In addition to the specifying possession construction that involves the first or second person possessor preceding the possessum, we can also identify three forms of external possession which are available to all possessors regardless of the personal features of that possessor.

The defining feature of external possession is that, unlike the forms of possessive constructions examined so far, an external possession construction requires that there be some mention of the person, number or gender features of the possessor outside the NP in which the possessum appears. This is found in three different ways:

- possessor as topic (NP unmarked for possessor);
- possessor marked on the verb by means of vowel alternations (possessor still marked inside the NP);
- possessor marked as object NP (NP with possessum unmarked for possession, and appears as an oblique, not as object).
These three different forms of external possession are described individually in the following sections.


### 9.5.2.1 Topic possessors and involuntary states

The first of the possessor-as-topic constructions involves body parts as the locus of an experience, as in (32), and might be best analysed as a topic-comment construction:
(32) Nì no iri.

1SG hand cramp
'My hand's cramped up.'
In sentences of this sort the experiencer possessor is cast as the topic, and the possessum, a body part and the locus of the sensation, is the subject of a clause. The sentence above can be modelled as shown below:


In a sense this is not a 'true' external possession construction, in that the possession is not marked external to the NP within the same clause; the possession is not explicitly coded as such, but rather the topic-comment relationship that applies between the topic and the clause is interpreted as being one of possession between a possessor topic and a possessum comment, which is subject of the clause. Constructions of this sort all involve monovalent predicates of involuntary states.

Chapell (1999) describes a similar construction in various Chinese languages, and Iwasaki (2002) presents data from Thai for what appears to be the same kind of construction, though described under different labels.

### 9.5.2.2 Gender assumption

The second form of external possession is also constrained to involve body parts and their possessors, but this time they are the objects of adversely affecting bivalent clauses. The possessum is marked inside the NP for possession as normal, and the external possession is found in the assumption of grammatical gender features of the possessor by the object NP as a whole, which are marked on the form of the verb. This construction can only be identified when the main verb is one that varies depending on the gender of the object. For instance, the alternation in verb forms seen in (33) can only be attributed to the gender of the object.

```
a. Ke (nì, mè, ke) ke=ká.
    3SG.NF 1SG, 2SG, 3SG.NF 3SG.NF=hit
    'He hit (me, you, him).'
```

b. Ke pe ke=láng.
3SG.NF 3SG.F 3SG.NF=hit.F
'He hit her.'

In these cases we would not want to argue for different syntactic structures, but simply the feature [feminine] on the object in the b. sentence being obligatorily marked on the predicate by the choice of verb stem.

We see these same alternations in the choice of the verb depending on the grammatical gender of the possessor of an object. When the possessor and the possessum have the same grammatical gender, there is no alternation. A trivial example of this can be seen below. Here the possessor, Áì-nì=ne, is non-feminine, as is the possessum, lánghùe-ké=ke (the subject is also non-feminine, but this would not in any case have influenced the choice of the suppletive verb stem láng) The predicate, therefore, does not select the feminine verb stem, in the absence of any arguments that could bear this feature.

| Áì-nì=ne | lánghùe-ké=ke | ke=ká. |
| :--- | :--- | :--- |
| father-1SG.GEN=1SG.DAT | calf-3SG.NF.GEN=3SG.NF.DAT | 3SG.NF=hit |
| 'He hit my father's calf.' |  |  |

If there is a difference in grammatical gender between the possessor and the possessum, however, we might find a discrepancy between the gender of the object and the gender marked on the predicate. In the following example the possessor of the calf is female, and the verb of hitting is the one that is used with a feminine object.
a. Ánì-nì=ne
mother-1SG.GEN=1SG.DAT
lánghùe-pè=pe
ke=láng. calf-3SG.F.GEN=3SG.F.DAT 3SG.NF=hit.F
b. * ánì nì ne langhue pè pe ke ká

When the necessary conditions for gender assumption are met, gender assumption must occur. The b. sentence, without feminine gender coded on the verb, is not grammatical. We can show that this assumption of gender is a purely grammatical gender, and not based on the realworld sex of the referent, by testing with different sexed first or second person possessors: in all cases, the non-feminine verb form must be used:
$\begin{array}{ll}\text { Lánghùe-nì=ne } & \text { ke=ká. } \\ \text { calf-1SG.GEN=1SG.DAT } & \text { 3SG.NF=hit }\end{array}$
'He hit my calf.'
(male or female speaker)
$\begin{aligned} & \text { (37) } * \text { lánghùe-ǹ̀=ne ke=lang } \\ & \text { calf-1SG.GEN=1SG.DAT 3SG.NF=hit.F } \\ & \text { 'He hit my calf.' } \\ & \text { (ungrammatical for both male or female speakers) }\end{aligned}$
Finally, the action must adversely affect the object and its possessor. This can be seen by attempting to mark possessor's gender on a non-affective verb, such as fue 'see'. With this verb, gender can only be marked if it is the gender of the possessum (or of the possessor), but does not vary according to the gender of the subject. The first sentence of the following three is a control sentence, showing the unmarked verb of seeing, fue, in a morphosyntactic environment (possession by first person singular) that would not be expected to produce exceptional marking for gender on the verb (for a more detailed explication of the inflectional possibilities using 'see', see 7.2.3).

| No-nì=ne | ke=fue. |
| :--- | :--- |
| hand-1SG. GEN=1SG.DAT | 3SG.NF-see |

'He saw my hand.'

In the following sentences we can see that this same form of the verb, unmarked for gender, is also used when the possessor is feminine, exactly the circumstances that led to the use of the feminine form of the verb in (39). The use of the feminine form of the verb in this construction is ungrammatical.

No-pè=pe ke=fue.
hand-3SG.F.GEN=3SG.F.DAT 3SG.NF-see
'He saw her hand.'
(40) * no-pè=pe ke=fu
hand-3SG.F.GEN=3SG.F.DAT 3SG.NF-see.F
In these examples, then, we have seen that there are specific criteria that must be met in order for gender assumption to take place. These criteria are:

1. the possessum must be the object of its clause;

This construction is not possible with the subjects of monovalent or bivalent clauses, regardless of their semantic role.
2. possessum and possessor must be adversely affected by the clause;

A verb with little or no physical affect of its object does not license gender assumption. Even if there is significant physical affect, it must be to the detriment of the possessor.
3. possessum must be a body part of the possessor;

This is simply a formal statement of the requirement that in order for the possessor to be affected as well as the possessum, the possessum must be part of the possessor.
The morphosyntactic effects of this form of external possession are not demonstrably great. Morphologically, the gender of the possessor is marked on the verb, but, the possessor is still marked inside the NP as possessor, and the possessum still appears in the normal position for objects. A different set of morphosyntactic effects are found with another, final, form of external possession, described in the following section.

### 9.5.2.3 Function assumption

The final EP construction that we can identify involves the same morphosyntactic and semantic restrictions that have just been described for gender assumption. The demotional EP construction differs in that the possessor is marked as the sole object in the clause, and the possessum appears postverbally in the position usually allotted to goals.

The following pair of examples show first an example with no external possession. Here the target of the kicking is the possessed nominal húe mè me 'your stomach', which is predictably coded as the object of the clause. In (42), on the other hand, we can see the possessor as the object of the clause, coded with a single pronoun, and the head of the object NP in (41), húe, is now coded as a postverbal oblique NP.

No external possession

| Làng=pa húe-mè=me <br> foot=INSTR stomach-2SG. GEN=2SG.DAT | nì=ká. |
| :--- | :--- |
| 1SG=hit |  |


| Làng=pa | mè | nì=ká | húe. |
| :--- | :--- | :--- | :--- |
| foot=INSTR | 2SG | $1 \mathrm{SG}=$ hit | stomach |
| 'I kicked you in the stomach.' |  |  |  |

The criteria that must be met in order for this form of external possession to occur are not quite the same as those described for gender assumption; the possessum must be a body part of the possessor, and they must both be adversely affected by the clause, but for for function assumption the NP out of which the possessor raises need not necessarily be an object. Another, obvious, difference is that with function assumption there are much more widereaching morphosyntactic consequences in terms of the grammatical functions assigned to the arguments in the clause. An example of function assumption applying to the possessor of a non-object NP can be seen in (43), with the non-EP sentence shown in (44): In these sentences we can see that EP is obligatory, since the verb wé 'get' requires an animate subject.

External possession with function assumption

```
Nì làng-nì=ne nì=lú=ko mè=wé
1SG foot=1SG.GEN=1SG.DAT 1SG=release=OBV 2SG=get.F
    (húe-mè=me).
    stomach-2SG.GEN=2SG.DAT
    'I kicked you in the stomach.'
```

No external possession, no function assumption

```
Nì làng-nì=ne nì=lú=ko húe-mè=me
    1SG foot=1SG.GEN=1SG.DAT \(1 \mathrm{SG}=\) release=OBV stomach-2SG.GEN=2SG.DAT
        nì=ká.
        \(1 \mathrm{SG}=\) hit
        'I kicked your stomach.'
```

            Function assumption not possible without external possession
    * nì làng nì ne nì lú ko húe mè me

stomach-2SG.GEN=2SG.DAT | pe wé |
| :--- |
| $2 \mathrm{SG}=$ get.F |

When the possessor is coded as the object (that is, displaying preverbal position and a lack of case marking, as well as eligibility for object-like raising phenomenon) it assumes the properties normally associated with objects. When the possessum is coded in the postverbal goal position, it counts structurally as a goal for the purposes of competition with the negative morpheme (see 16.3). Note, however, that it is still treated grammatically as an argument bearing a core grammatical function, just as the postverbal recipient of ké leng 'give' is still testably a core argument (see 3.11 for the morphosyntactic constructions that test for core versus non-core status).

Another example of this form of external possession, one that is perhaps most familiar to readers of accounts of EP cross-linguistically (eg., those in Payne and Barshi 1999), are shown in the following examples. Here we can see that questions concerning the body part must be coded by an external possession structure.

| Naké mè kóeng ke=ká | nè? |
| :--- | :--- | :--- |
| dog 2SG tooth 3SG.NF=hit | Q |
| 'Where did the dog bite you?' |  |

```
* naké nòe-ha-mè=me kóeng ke=ká?
    dog body-what-2SG.GEN=2SG.DAT tooth 3SG.NF=hit
    'What part of your body did the dog bite?'
```

This sort of requirement for the external possession strategy over the plain coding strategy, precisely in the environment of pragmatic focus appearing in the phrase, helps to support the idea that the appearance of external possession in associated with particular pragmatic focus. In this case we are ascribing particular focus to the addressee, and not to the particular body part that was bitten. By contrast, in sentence (47) the body part would be assigned greater pragmatic salience than the person, which is nonsensical.

In a declarative statement, some speakers allow either coding choice with third person possessors, but others do not allow this. There is no obvious (to me) geographical, social, or age basis behind the different judgements. All speakers will accept the sentence in (48).
(48) Naké pe kóeng ke=láng lánghùe.
dog 3SG.F tooth 3SG.NF=hit.F calf
'The dog bit her on the calf'
On the other hand, only some speakers allow the possessum to be coded as the object, as in (49) (and this is only with third person possessors).

[^23](lánghùe 'calf' has non-feminine gender, so the form of the verb not marked for feminine object, ká, is used in this sentence)
The decreased salience of a third person, compared to a first or second person, might explain why some speakers do allow the alternation to take place for these possessors.

### 9.5.2.4 Different possession constructions compared

We have seen that there are three ways in which possession can influence the morphology of the clause in Skou, beyond simple marking of the possessor in the NP.

These different strategies, along with normal possession, are summarised point by point in table 137 xx , for quick comparison. In this table the arrangement is, left to right, from the least unusual to the most unusual form of possession.

Table 137. Possession and external possession strategies.

|  |  | Internal poss'n |  | External poss'n |
| :--- | :---: | :---: | :---: | :---: |
|  |  | Topic | Gender | Function |
| possession | assumption | assumption |  |  |
| Poss'n marked in NP? | yes | no | yes | no |
| Applies to P | yes | yes | yes | yes |
| Applies to S | yes | yes | no | no |
| Applies to A | yes | no | no | no |
| semantically unrestricted | yes | no | no | no |

We can see that the more possession strategies to the right in this table, the ones that involve the most morphosyntactic disruption of the strucure of the clause, are much more restricted in terms of the roles that they can apply to, and also the amount of overt marking of possession that is encoded in the sentence. As was seen in 9.5.2.3, function assumption does not overtly encode possession at all: the possessum appears marked as a postverbal oblique, and the possessor appears preverbally in the position associated with the P of the sentence, but there is no explicit link between the two, only a conventionalised one. That is, the structures found in the following two sentences is identical, and only the pragmatic relations operating between the arguments allows for the possessive interpretation in the second:

Ke nì ke=ká pá.
3SG.NF 1SG 3SG.NF=hit house
'He hit me in (the/a) house.'
(No implicature about the identity of the owner of the house, or of the relevance, if any, of the house to the action)

$$
\begin{array}{llll}
\text { Ke } & \text { nì } & \text { ke=ká } & \text { há. }  \tag{51}\\
\text { 3SG.NF } & \text { 1SG } & \text { 3SG.NF=hit } & \text { nose }
\end{array}
$$

'He hit me in the nose.'
(The affected nose must be the nose of the object-encoded argument, not anyone else's, and that object must be adversely affected by the action)
The various restrictions mentioned above do represent a lot of semantic information to have required of a construction that overtly matches another one. Of course, pá in (50) is coded in the location position, and há in (51) is in the goal/general oblique position, but without an auxiliary or a negated sentence that difference is not obvious.

By contrast the possessum is still marked by pronominal affixation with gender assumption strategies, even though the unusual marking on the verb shows that something, namely external possession, is going on. Possession by a topic-comment construction is the broadest form of external possession, in reality simply one of a related set of properties that apply between a topic discourse function and its comment.

### 9.6 Headless possessive phrases

While it is most normal for a possessive construction to appear in the form of a noun and morphological (and optionally NP) elements to show how it is possessed, as described in 9.2, it is also possible for possession to appear without any possessed element in the NP, and so to serve as a headless possessive phrase. Two examples can be seen in the following sentence; the two NPs both consist simply of a free pronoun with dative marking, with no nominals present.

| $[\emptyset$ Nì=ne ] | mè=yata | pi-pi, |
| :---: | :---: | :--- |
| 1SG=1SG.DAT | 2SG=transact | 2SG.do-RED |
| $\left[\begin{array}{l}\text { M è=me }]\end{array}\right.$ | nì=yata | li-li. |
| 2SG=2SG.DAT | 1SG=transact | do-RED |
| 'You buy mine, and I'll buy yours.' |  |  |

These equate to headless possession constructions in English, where the 'mine' - 'yours' set of pronouns are used, rather than the 'my' - 'your' set. With nominal possession in English the dummy marker 'one' is used to fill the structural position called for by the phrase structure rules.This is also a possibility; compare the following sentences, which differ only in the presence versus absence of the pleonastic ya 'thing', and the choice of the pronominal sets that are used with a noun, or those that are independent.

$$
\begin{array}{llll}
{\left[\begin{array}{lll}
\text { Ø } & \text { ìne ] } & \text { ko } \\
\text { lue } & \text { tue } & \text { nè? } \\
\text { 'SG=1SG.DAT } & \text { be.at } & \text { 3SG.F.do } \\
\text { 'Where's my one?' } & &
\end{array}\right)} \tag{53}
\end{array}
$$

```
[ Ya-nì=ne ] ko tue nè?
    thing-1SG.GEN=1SG.DAT be.at 3SG.F.do Q
    'Where's my one?'
```

There is little, if any, pragmatic or semantic difference between these two sentences. There are, however, syntactic differences. The apparently headless possessive structures are allowed only if the possessor is pronominal, but not for a nominal possessor. If a nominal possessor is to appear in a lexically 'headless' possessive structure, then the same dummy noun ya 'thing' must be used in what appears to be a 'headless' relative clause (see 8.3).

| Áì-nı̀=ne | ya-ké=ke ko |  |
| :---: | :---: | :---: |
| father-1SG.GEN=1SG.DAT | thing-3SG.NF.GEN=3SG.NF.DAT be.at | 3SG.F.do |
| nè? |  |  |
| where |  |  |
| 'Where's my father's one?' |  |  |
| * áìnì-ne $\quad \varnothing$ | ke=ke ko tue nè? |  |
| father-1SG.GEN=1SG.DAT | 3SG.NF=3SG.NF.DAT |  |

Another difference between the two 'headless' possessive constructions is that the dummy ya must be used if there is anything else present in the NP. The use of the genitive+dative
morphemes with no ya is thus only possible if there is no demonstrative in the NP, and no adjectival or relative clause modification. Some examples of the contrast are given in the following examples.

$$
\left[\begin{array}{lllll}
\text { Ya-nì=ne } & \text { hápa }] & \text { ko tue nè? } \tag{58}
\end{array}\right.
$$ thing-1SG.GEN=1SG.DAT small be.at 3SG.F.do Q 'Where's my little one?'

$$
\begin{array}{llll}
*\left[\begin{array}{lll}
\text { Q }
\end{array} \text { Nì=ne=ing a }\right] & \text { ko } & \text { tue } & \text { nè? }  \tag{59}\\
\text { 1SG=1SG.DAT=the } & \text { be.at } & \text { 3SG.F.do } & \mathrm{Q} \\
\text { 'Where's that one of mine?' } & &
\end{array}
$$

$$
\left[\begin{array}{llll}
{\left[\begin{array}{ll}
\text { Ya-nì }=\text { ne= ing a ] } \\
\text { thing-1SG.GEN=1SG.DAT=the }
\end{array}\right.} & \begin{array}{l}
\text { ko } \\
\text { 'Where's that one of mine?' }
\end{array} & \text { be.at } & \text { 3SG.F.do }
\end{array} \quad \begin{array}{l}
\text { nè? }  \tag{60}\\
\text { Q }
\end{array}\right.
$$

## XXXXXXXXXX

### 9.7 Clausal possession

In addition to the various phrasal means of marking an item in a noun phrase as being possessed, there are also different strategies for marking possession as a clausal predicate. We shall examine the two strategies that mark possession, one verbal and one non-verbal.

### 9.7.1 Non-verbal clausal possession

The normal way to code clausal possession ( X has a Y ) is by a non-verbal construction. While there are no restrictions on the sorts of nominals that can be used in this construction, it is unusual to use this construction with an inalienable nominal since it obligatorily shows phrasal possession. The following examples, using a range of different nouns, show that both animate and inanimate nominals may be possessed.
Ha=wia nì=ne.
bag=this 1 1SG=1SG.DAT
'This bag is mine.'

Pe=angku=wia nì=ne.
3SG.F=child=this 1SG=1SG.DAT
'This girl is mine.'
This construction is not simply the possessive and dative morphemes appearing independently of any noun; that is, the sequence [nine] [|\ _] in (61) is not the same set of morphemes as the same sequence in (63).

Ha=wia ha-nì=ne.
bag=this bag-1SG.GEN=1SG.DAT
'This bag is my bag.'

The non-identity of this construction with the possessed nominal construction can be shown by the behaviour with a possessor that is not first or second person singular. Recall from 6.3 that the genitive pronouns are identical to the free pronouns except for the application of a HL tone melody to the syllable. In the case of the first or second person singular pronouns, such as nì in the examples above, the pronoun has a HL melody assigned lexically, so there is no difference phonologically between the form of the free pronoun and the genitive pronoun. If we examine the same sentences with third person pronouns, however, we can see that there is a tonal difference: in the predicative possessive sentence the pronouns are clearly a free pronoun with a dative clitic attached, not a sequence of two 'clitics', the genitive and the dative. In the case of the possessed nominal, the genitive suffix and dative clitic are used.
(64) Ha=wi a ha-pè=pe. bag=this bag-3SG.F.GEN=3SG.F.DAT
'This bag is her bag.'
[np Ha=wi a] [np pe=pe].
bag=this $\quad 3$ SG.F=3SG.F.DAT
'This bag is hers.'
(66) * [np ha=wi a ] [np pè=pe ]
bag=this 3SG.F.GEN=3SG.F.DAT
(67) * ha=wi a ha-pe=pe
bag=this bag-3SG.F=3SG.F.DAT 'This bag is her bag.'

The same forms of clausal possession are applied to animate nouns at well.

```
Ingéngong=wi a ingéngong-pè=pe.
cat=this cat-3SG.F.GEN=3SG.F.DAT
'This cat is her cat.'
```

```
[nP Ingéngong=wi a ] [nP pe=pe].
    cat=this 3SG.F=3SG.F.DAT
    'This cat is hers.'
```

Inalienably possessed nouns are at best of dubious grammaticality in this construction, and for some speakers they are rejected outright. The use of a full NP predicate, with a possessed noun, is the preferred clausal possession strategy.

$$
\begin{array}{ll}
\text { \# Yá-ne=wi a } & \text { nì=ne. } \\
\text { sister-1SG.DAT=this } & \text { 1SG=1SG.DAT } \\
\text { 'This sister is mine.' } & \tag{71}
\end{array}
$$

| Yá-ne=wi a | yá-ne-nì=ne. |
| :---: | :---: |
| r-1SG.DAT=this | sister-1SG.DAT-1SG.GEN=1SG.D |
| This sister is my si |  |

Further discussion on the status of the pronominal elements in this construction can be found in 5.1.2.

### 9.7.2 Clausal possession with a verb

Clausal possession can be encoded with the generic light verb 'do', with the possessor serving as the subject of this verb and the possessum as the object; in this way the arguments of the clause function very much like the arguments of a clause with the verb 'have' in English. Examples of this use of the light verb as the inflecting verb in a clausal possessive construction can be seen in the following sentences.
$\mathrm{Ku} \quad$ nì=li.
child 1SG=do
'I have a child.'

| Ke=bà=ing a | ku | híngtung | ke=li. |
| :--- | :--- | :--- | :--- |
| 3SG.NF=person=the child | two | 3SG.NF=do |  |
| 'He has two children.' |  |  |  |

The same morphemes may be interpreted as an adjunct nominal plus the generic verb 'do', meaning 'I (have) give(n) birth to a child.' The possessive reading described here cannot be interpreted as simply an aspectual extension of the 'give birth' reading that is found with ku li, since, as can be seen in (73), the 'have' reading is also available for male subject, where this is (biologically, as well as grammatically) impossible with the 'give birth' reading.

Not all different types of possession may be encoded in this way. Specifically, we may identify the following conditions on the use of verbal clausal possession:

- inalienable body-part nouns (as defined in 9.3) are eligible for possession with this strategy;
- kinship terms may be the possessum, regardless of whether they otherwise count as alienable or inalienable.
- alienable nouns may not be possessed in this way;

Compare the grammaticality of (72) above with the complete ungrammaticality of (74) if it is interpreted with a possessive reading. When the verb is interpreted with a sense of production of working (see 14.3), then the sentence may be parsed grammatically. In order to express possession of nouns such as hòe 'sago' in (74), the non-verbal clausal possessive structures that have been described in 9.7.1 must be used, seen here in (75).

```
Hòe nì=li.
sago 1SG=do
* 'I have (some) sago.'
    'I processed (some) sago.'
```

Hòe=ing a nì=ne.
sago=the $\quad 1 \mathrm{SG}=1 \mathrm{SG}$. DAT
'I have (some) sago.'
$O R$ 'The sago is mine.'
With nouns that cannot even be interpreted as the product made, the only possible interpretation of the $\mathrm{N}+\mathrm{li}$ construction is that is marks the inception of possession. This is similar to the inchoative sense with which li is used with adjectives (5.2, 7.2.1, 7.7, and also 8.6 for inchoative nominal predicates).

### 9.7.3 Clausal possession without a verb

For nominals that do not fit into the restrictive categories that have been listed in 9.7.2, and so are not eligible to appear in a verbal clausal possession structure, a close translation equivalent alternative is to mark the possession phrasally, and to the present the nominal as an existential clause with verbs of being. This is shown in (76).
(76) Hòe-nì=ne ko tue.
sago-1SG.GEN=1SG.DAT be.at 3SG.F.do
'I have some sago.'
(= 'My sago exists.')
This is grammatical, and is suggested by Skou speakers as a translation of sentences such as 'I have some sago.' (presented in Papuan Malay as Sa=pu sagu ada, literally 'My sago exists.'), but it does not seem to be, in the opinion of the writer, a preferred strategy. Most speech acts indicating clausal possession involve a clear deictic gesture (either physical or else in speech), and rather than simply asserting that a particular possessor does indeed have something or the other (in the abstract, with the location unspecified), a more natural discourse strategy in Skou is to either indicate that possessum with a gesture, or else to state where it is. The following examples, variants of the sentence in (75) and (76), are more 'natural', though no more or less grammatical, or even felicitous.

Fuea hòe-nì=ne.
that sago-1SG.GEN=1SG.DAT
'That's my sago.'

| Hòe-nì=ne | ko | tue | nakong. |
| :--- | :--- | :--- | :--- |
| sago-1SG. GEN=1SG.DAT be.at | 3SG.F.do | space.under.a.house |  |
| 'My sago is under the house.' |  |  |  |

The infelicitousness of a locational clause specifying the location without a verb is shown in (79). This sentence is most likely to be interpreted (following the non-verbal grammar for nominal identificational clauses that lack any inchoative or inceptive sense) as 'My sago is the space under a house.', which, being clearly nonsensical, is judged as being a bad example of language use.
(79) \# Hòe nì ne nakong

With something that can be conceived of as having a degree of inception, it is possible to use the light verb li 'do' instead of (or in addition to) ko tue as the head of the predicate, though in these cases it is somewhat infelicitous to construct the sentence without an overt stated location.

| Rítóe-nì=ne | tue | (ko | tue) | hòe-pa. |
| :--- | :--- | :--- | :--- | :--- |
| tree-1SG.GEN=1SG.DAT | 3SG.F.do | be.at | 3SG.F.do | sago-water |
| 'My tree is at the sago swamps.' |  |  |  |  |
| \# rítóe nì ne tue ko tue |  |  |  |  |

This sentences allows the verbal predicate because a particular tree can come to be found at a particular location, not through transplanting but simply through growing from a sapling stage. In this sense it fulfils the conditions for inchoative coding, and so unambiguous. The requirement for an overtly stated location (minimally wi a 'here' or fue a 'there') is present
because stating simply that something came into being will be marked with a more specific verb, such as 'grow' or 'become big' (using another inchoative construction, bápáli li big do).

### 9.7.4 Possessive predicates

Possession may be coded predicatively, as in the English 'That's mine.' In Skou this type of predicative possession is shown with a non-verbal clause, using the same interrogative and the same possessive markers that are found when marking possession phrasally.

| Ku=ing $\quad$ [PRED bá-ké ]? |
| :--- |
| child=DEIC |
| 'Whose child is that?', |
| (literally, 'That child is whose?') |

Answers to questions are shown in the same way, with a free pronoun affixed for possessive marking appearing as the predicate, with no noun as its head.

```
Ing a [pRED nì=ne].
the 1SG=1SG.DAT
'That's mine.'
```

An alternative to this usual means of coding a possessive is found more commonly with questions, and involves the possessor and the possessed appearing in the predicate, with just a deictic as the subject:

| Ke=ing | [PRED | bá |
| :--- | :--- | :--- |
| 3SG.NF=DEIC | ku-ké ]? |  |
| who | child-3SG.NF.GEN |  |

'Whose child is that?'
(literally, 'That one is whose child?')
This latter strategy is also the more commonly heard one. Marking the possession, without the possessum, as the predicate is in normal (ie., non-elicited) speech would only be heard as the answer to questions such as (82), and would not be offered as a statement about possession, preferring instead the formulation seen in (85).

$$
\begin{align*}
& \text { Ke=ing ku-nì=ne. }  \tag{85}\\
& \text { 3SG.NF=DEIC child-1SG.GEN=1SG.DAT } \\
& \text { 'He's my child.' }
\end{align*}
$$

Some further discussion of the similarity in appearance of the genitive+dative pronominal sets to the free pronoun+dative sets can be found in 5.1.2.

### 9.8 Interpretation of Possessive scope

When a nominal is marked for possession, the identity of the possessor is usually immediately retrievable. In the following sentence, for instance, the owner of the house platform must be the subject of the sentence:

$$
\begin{array}{ll}
\text { Nì=ta hùng } & \text { pá-loe-nì=ne. }  \tag{86}\\
\text { 1SG=seating sit } & \text { house-platform-1SG.GEN=1SG.DAT } \\
\text { 'I sat down on my platform.' }
\end{array}
$$

In this sentence the identity of the owner can be determined from the fact that there is only one immediately prior referent in the discourse, and most unambiguously from the fact that the
genitive and dative suffixes used on the nominal show the same, unique, person, number and gender features as those of the previous referent - there is only one first person singular argument.

If the possessor and the subject of a clause were both third person, then possible ambiguity would arise, as in the following English sentence. In this example the possessor of the location can be interpreted most naturally as the subject of the sentence, but, given appropriate context, can also be interpreted as another nominal, not mentioned in this sentence.
(87) She $_{i}$ sat down on her $\mathrm{i}_{\mathrm{i}}$ ? ${ }_{\mathrm{j}}$ platform.

In Skou, as in English, sentences of this sort display potential ambiguity: is the female owner of the platform the same person as the female subject of the sentence? The sentence, in translation, reads as follows in Skou.

Pe=ta w-ùng pá-loe-pè=pe.
3SG.F=seating 3SG.F-sit house-platform-3SG.F.GEN=3SG.F.DAT
'She ${ }_{i}$ sat down on her ${ }_{i, j}$ veranda.'
This is a genuine ambiguity, but is almost certainly resolved in Skou in favour of the interpretation of the owner and the subject being the same person. The above sentence, thus, would most likely be interpreted a referring to a state of affairs in which someone is sitting on her own platform. This is best thought of not as being a constraint on subject coreference for possessors of oblique nominals, but rather a realisation of the general cross-linguistic tendency for discourse topics to assume the role as 'default reference' in the span of discourse for which they pertain: a subject is the most likely topic in the sentence in which it occurs, and so is the most likely possessor of a possessed oblique nominal. Only in the case of a previously established, and recently maintained topic in the discourse other than the subject is it at all likely that the possessor will be interpreted as other than the subject of the clause in which it appears. This is not to say that speakers could not, or would not, ever utter sentence (88) with the intention of describing one female participant sitting in the house of another. This is a possible way of expressing the desired meaning, but does lead to ambiguity.

An example of the sort of context that would allow the felicitous and unambiguous use of what is, from a mono-clausal perspective, an ambiguous construction, is the following extract, taken from the point of introduction of a new topic in a conversation, seen in (89).


While the two possible interpretations of (88) are coded in the same way morphologically, there are two morphosyntactic means by which they may be differentiated. Firstly, the optional omission of the dative pronoun from the possessive construction (see 6.3.1, 9.4.1) is only possible if the owner and the subject are the same referent. In (90), compared to (88), there is no possible ambiguity.

$$
\begin{array}{ll}
\text { Pe=ta w-ùng } & \text { pá-loe-pè. }  \tag{90}\\
\text { 3SG.F=seating 3SG.F-sit } & \text { house-platform-3SG.F.GEN } \\
\text { 'She }_{\mathrm{i}} \text { sat down on } \text { her }_{\mathrm{i}} / *{ }_{\mathrm{j}} \text { veranda.' }
\end{array}
$$

Secondly, the use of the emphatic marker following the possessive suffix and dative clitic makes the reference unambiguous: in (90) the only possible interpretation of the possessor is to refer to the person who sits. Even if we were to place the sentence in a discourse context with a highly salient, highly topical but different 3 SG.F referent, the possessor in this sentence can only be interpreted as referring to the subject of that same sentence.

```
Pe=ta w-ùng pá-loe-pè=pe=wò.
3SG.F=seating 3SG.F-sit house-platform-3SG.F.GEN=3SG.F.DAT=EMPH
'She i sat down on her own i / *j platform.'
```

We can show that this is not simply a consequence of the linear order of the elements of the clause by presenting the same examples in negated sentences: in these cases the possessive reference is the same, even though there is no linear predecessor of the possessed nouns (see chapter 16 for a discussion of the grammatical changes associated with negation in Skou). Note particularly that in (91) the use of the emphatic morpheme is acceptable even though the possessed noun appears before its antecedent, the proclitic on the verb.

| Pá-loe-pè=pe | pe=ta $w$-ùng | ka. |
| :--- | :--- | :--- |
| house-platform-3SG.F. GEN=3SG.F.DAT | 3SG.F=seating 3SG.F-sit | NEG |
| 'She ${ }_{i}$ didn't sit down on her ${ }_{i}, j$ |  |  |
| platform.' |  |  |


| Pá-loe-pè | pe=ta w-ùng |
| :---: | :---: |
| house-platform-3SG.F.GEN | 3SG.F=seating 3SG.F-sit |
| 'She ${ }_{\text {i }}$ didn't sit down on her | *j platform.' |


| Pá-loe-pè=pe=wò | pe=ta $w$-ùng | ka. |
| :--- | :--- | :--- |
| house-platform-3SG.F. GEN=3SG.F.DAT=EMPH | 3SG.F=seating 3SG.F-sit | NEG |
| 'She ${ }_{i}$ didn't sit down on her $o w n_{i} / *_{j}$ platform.' |  |  |

Similar scope applies to other obliques, including postverbal goals and beneficiaries, and instrumentally marked NPs. With the instruments we can see that there is not a strong linear relationship between the possessor and the possessum, since the instrument may appear in a variety of positions, and the scope is the same regardless of their position in the clause. The following three sentences show that the position of the fully possessive-marked instrument does not affect the interpretation of its possessor.

Pe tangtítí-pè=pe=pa pe=te Nofé.
3SG.F vehicle-3SG.F.GEN=3SG.F.DAT=INSTR 3SG.F=3SG.F.go Jayapura
'She ${ }_{i}$ went to Jayapura by her $\mathrm{i}_{\mathrm{i}, \mathrm{j}}$ car.'
(96) Pe pe te tangtítí pè pe pa.
'She ${ }_{i}$ went by her ${ }_{i, j}$ car.'
(97) Tangtítí pè pe pa, pe pe te N ofé.
'By her ${ }_{i, j}$ car, she ${ }_{i}$ went to Jayapura.'
In the next three sentences we can see that if the dative clitic is omitted from the clause, the interpretation of the possessor is restricted to the (sole) argument of the immediate clause:

(99) Pe pe te tangtítí pè pa.
'She ${ }_{i}$ went by her $\mathrm{r}_{\mathrm{i},{ }^{*} \mathrm{j}}$ car.'
(100) Tangtítí pè pa, pe pe te Nofé.
'By her $\mathrm{r}_{\mathrm{i},{ }^{*} \mathrm{j}}$ car, she $\mathrm{i}_{\mathrm{i}}$ went to Jayapura.'
The following three sentences show the possible positions of an instrumental NP in the clause, appearing preverbally before or after the object, or postverbally (see 3.13 and 11.6 for a summary of the positional restrictions of instruments in the clause).
(101) Pe tangnófó totá=pa móe pe=r-ú.

3SG.F knife sharp=INSTR fish 3SG.F=3SG.F-cut.F
'She cut up the fish with a sharp knife.'
(102) Pe móe tangnófó totá pa pe rú.
'She cut up the fish with a sharp knife.'
(103) Pe móe pe rú tangnófó totá pa.
'She cut up the fish with a sharp knife.'
The possible antecendents are not changed when the instrumental NP is possessed, regardless of the position of the NP.
(104) Pe tangnófó-pè=pe totá=pa móe pe=r-ú.

3SG.F knife-3SG.F.GEN=3SG.F.DAT sharp=INSTR fish 3SG.F=3SG.F-cut.F
'She $\mathrm{e}_{\mathrm{i}}$ cut up the fish with her $\mathrm{i}_{\mathrm{i} j}$ sharp knife.'
(105) Pe móe tangnófó pè pe totá pa pe rú.
'She ${ }_{i}$ cut up the fish with her ${ }_{i, j}$ sharp knife.'
(106) Pe móe pe rú tangnófó pè pe totá pa.
'She ${ }_{i}$ cut up the fish with her ${ }_{i, j}$ sharp knife.'
(107) Tangnófó pè pe totá pa pe móe pe rú.
'With her $\mathrm{r}_{\mathrm{i}, \mathrm{j}}$ sharp knife, she $\mathrm{i}_{\mathrm{i}}$ cut up the fish.'
Similarly, when the possessed instrument is marked only with genitive suffixes, and not with dative clitics, the possessor is restricted to an argument of the predicate in the clause, regardless of its position.
(108) Pe tangnófó-pè totá=pa móe pe=r-ú.

3SG.F knife-3SG.F.GEN sharp=INSTR fish 3SG.F=3SG.F-cut.F
'She ${ }_{i}$ cut up the fish with her $_{i},{ }^{*}{ }_{j}$ sharp knife.'
(109) Pe móe tangnófó pè totá pa pe rú.
'She ${ }_{i}$ cut up the fish with her $\mathrm{i}_{\mathrm{i},{ }^{*} \mathrm{j}}$ sharp knife.'
(110) Pe móe pe rú tangnófó pè totá pa.
'She ${ }_{i}$ cut up the fish with her $_{i},{ }^{*}{ }_{j}$ sharp knife.'
(111) Tangnófó pè totá pa pe móe pe rú.
'With her $\mathrm{i}_{\mathrm{i},{ }_{\mathrm{F}}}$ sharp knife, she ${ }_{\mathrm{i}}$ cut up the fish.'
We shall now turn our attention to the scope of possessive antecedency in bivalent clauses, in which there are potentially two immediately preceding arguments, and so potential ambiguity arises. When the person/number/gender features of the two arguments in a clause differ, the interpretation of the possessor of some adjunct is obviously unproblematic, as in the following
pair of clauses, in which the subject is feminine and the object is non-feminine, and which different only in the choice of gender on the possessive marking on the location.
(112) Martha pe ke=bà=ing a pe=fu

Martha 3SG.F.ERG 3SG.NF=person=the 3SG.F=see.F
pá-pè-pe.
house-3SG.F.GEN=3SG.F.DAT
'Martha saw the man in her house.'
(113) $M$ artha pe ke bà ing a pe fu pá-ké-ke.
house-3SG.NF.GEN=3SG.NF.DAT
'Martha saw the man in his house.'
In these examples, and analogous ones, the fact that the only possible antecedents for the possessive marking are nominals with different genders makes the interpretation of the reference of the possession simple. There is no restriction on which noun may be the potential possessor of the oblique. Where the morphologically marked gender of the genitive and dative morphemes on the possessum is sufficient to make the interpretation of the possessor unambiguous, then an interpretation is possible. Similarly, if there is a first or second person argument in the pool of possible antecedents, the interpretation of the identity of the possessor is unproblematical, since the possessive marking on the noun will make the antecedent of the possessive marking unambiguous.
(114) Pe nì=fu pá-pè=pe.

3SG.F 1SG=see.F house-3SG.F.GEN=3SG.F.DAT
${ }^{\prime} I_{i}$ saw her ${ }_{j}$ in her $*_{i} / \mathrm{j} /$ ?k house.'
Pe ǹ̀=fu pá-nì=ne.
3SG.F 1SG=see.F house-1SG.GEN=1SG.DAT
' $I_{i}$ saw her in $\mathrm{my}_{\mathrm{i}}$ house.'
In the second of the two examples above the first person singular features of the possessive marking completely unambiguously identifies the possessor as the same as first person singular subject. In the first of the above examples it is possible for the female possessor to be someone other than the immediately preceding female argument of the verb, but this is a most unlikely reading. If a female possessor is intended other than the one obvious from the clause, it will in most discourse appear as a full NP, making the possessive reference unambiguous, as in (116).

Pe nì=fu Maria pá-pè=pe.
3SG.F 1SG=see.F Maria house-3SG.F.GEN=3SG.F.DAT
' $I_{i}$ saw her ${ }_{j}$ in Maria's $*_{i} / ? *_{j} / \mathrm{k}$ house.'
In this example it is just possible that the person seen is also the owner of the house, but this is a highly marked reading of the sentence. A more natural way to say 'I saw Martha in her (Martha's) house.' would be to code Martha as the object of the verb, as in the example following. Here the reference of the possessor can only possibly be with the object, and not with the subject (even if we were to re-cast the sentence with a third person singular feminine subject, it could not be the possessor in this case). A reading of the sentence with a non-subject, non-object possessor is also ungrammatical.
(117) Martha nì=fu pá-pè=pe.

Martha 1SG=see.F house-3SG.F.GEN=3SG.F.DAT
${ }^{\prime} I_{i}$ saw Maria ${ }_{j}$ in her ${ }_{\mathrm{i}} / \mathrm{j} /$ / $_{\mathrm{k}}$ house.'

Here the reference of the possessive construction is still clause-internal, and the maximal identificatory load is with the core argument, and not on the oblique. This appears to be a preference in the language: contentful expressions should be coded as core arguments if possible, and salient information in oblique phrases is likely to be interpreted as contrastive or in some other way 'marked'.

From what we have seen so far we might infer that there are no restrictions on the interpretation of the possessor of an oblique nominal. This is not so, and the restrictions emerge when morphology is insufficient to disambiguate the reference of the possessor. When the two arguments in a bivalent clause share the same person, number and gender features, a postverbal oblique is interpreted as belonging to the P , if the person/number/gender categories of the P and the possessor are not contradictory.

Amos ke Pius ke=fí pá-ké=ke.
Amos 3SG.NF.ERG Alfius 3SG.NF=meet house-3SG.NF.GEN=3SG.NF.DAT 'Amosi met Alfius ${ }_{\mathrm{j}}$ at his* ${ }_{\mathrm{i}} / \mathrm{j} / ? * \mathrm{k}$ house.'

Unlike monovalent sentences such as (88), (92), and (95) - (97), (118) is not ambiguous: there is a very strong preference for treating the possessor as being the P of the clause. In order to have a different restriction, either the name of the possessor may be mentioned, as in (119), or the reflexive strategy, seen earlier in (120), may be used, in which case the only possible reference is to the A of the clause.
(119) Amos ke Pius ke=fí Amos pá-ké=ke.

Amos 3SG.NF.ERG Alfius 3SG.NF=meet Amos house-3SG.NF.GEN=3SG.NF.DAT 'Amos ${ }_{i}$ met Alfius ${ }_{j}$ at his $\mathrm{s}_{\mathrm{i}} / *_{\mathrm{j}} / * \mathrm{k}$ house.'

```
Amos ke Pius ke=fí
Amos 3SG.NF.ERG Alfius 3SG.NF=meet
    pá-ké=ke=wò.
    house-3SG.NF.GEN=3SG.NF.DAT=EMPH
    'Amosi met Alfiusjat his i /*j /*k own house.'
```

In the following example both the A and the P are male, and so non-feminine gender. This means that the feminine possessive morphology on the location can only be interpreted as referring to someone other than the arguments of the clause in which they are found. This someone will most likely be the topic of the paragraph or discourse in which this sentence is embedded.

Amos ke Pius ke=fí pá-pé=pe.
Amos 3SG.nF.ERG Alfius 3SG.NF=meet house-3SG.F.GEN=3SG.F.DAT 'Amos ${ }_{i}$ met Alfius ${ }_{j}$ at her $*_{i} / *_{j} / \mathrm{k}$ house.'
We have seen that, if the dative clitic is omitted, then the interpretation of possessive antecedency is restricted to the arguments of the predicate in which it is found. The one exception to this involves cases such as the preceding sentence, where the pronominal features marked by the possessive morphology are incompatible with both of the possible referents in the clause. In that case the possessor will be interpreted as someone other than one of the arguments of the clause, as can be seen in (122).
(122) Amos ke Pius ke=fí pá-pè.

Amos 3SG.NF.ERG Alfius 3SG.NF=meet house-3SG.F.GEN
'Amos ${ }_{\mathrm{i}}$ met Alfius $\mathrm{s}_{\mathrm{j}}$ at her ${ }_{\mathrm{i}}^{\mathrm{i} / *_{\mathrm{j}} / \mathrm{k}}$ house.'
We can summarise the conditions on possessive antecedency, presented here, as follows:

- if the morphological form of the possessive marking clearly differentiatesbetween the possible possessing referents (in terms of person, number, or gender), then any reference is possible.
- if the morphological form of the possessive marking allows for possible realworld ambiguity, as is the case for third person reference, then:
- there is a preference for the most immediate possible referent (in terms of predicate structures, where arguments » non-arguments) to be interpreted as the antecedent of the possessive marking.
- this can be overridden in the case of a highly topical referent other than the most immediate.

The next section presents one further complication in the expression of possession, that involving kinterms and the fossilisation of certain inalienable possessive marking.

### 9.9 Kinship

The Skou kinship system of Skou is broadly of the xxxxxx type, in that it regularly conflates the differences between though there are indications that the languages in fact displays two systems coexisting in the one set of terminologies. For instance, referring to ego's siblings there are the terms bahúe 'elder sibling' and bafàng 'younger sibling', which do not distinguish sex, and also yá(ne) 'sister' and yu(ne) 'brother', which do not distinguish age. The simplest explanation for the existence of both these terms is that the language originally employed just one of the oppositions, and that the second pair have been borrowed as a result of extensive contact with members of a culture with a different system. The fact that yu(ne) is used for parallel cousins of either sex as well as for brothers, but not sisters, and that both bahúe 'elder sibling' and bafàng 'younger sibling' fit into the general specifying-pronoun system.

Despite the many terms that do not lexically specify sex, we could well argue that sex distinctions are basic in Skou. The fact that, for instance, the terms that do not refer to sex, such as (ang)ku 'child', are almost obligatorily marked for grammatical gender by pronominal clitics, means that indication of sex is a basic part of any kin reference in Skou, even if it is not part of the basic lexical specification of the word. On the other hand many of the terms that do indicate relative age appear to have transparently incorporated elements to indicate that age: in tóeùe 'mother's younger sister' and bahúe 'elder sibling', for instance, the -(h)ue element is possibly related to húe 'old' (though with some extremely irregular and unwarranted semantic change in the case of tóeùe).

For instance, examine the following terms for different siblings. While only two of them lexically specify the sex of the referent, all of them must explicitly mention sex, by means of the gender-marking system if necessary, in order to be felicitously used with real-world reference. On the other hand only two of the terms specify relative age. There are no lexical items to express relative age, if it is not built into the lexical semantics of the lexical item, and while hue 'old' and a 'young' may be used to give an approximation of this difference, these adjectives are never required. Finally, it is noteworthy that none of the kinterms that specify relative age are included in the small set of inalienable nouns, indicating that they are not as integrated as the sex-specific terms.

| (123) | Root |  | ... use | ... gender | ... age |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | yu(ne) | 'brother' | yu(ne) | yu(ne) | yu(ne) (a), yu(ne) (húe) |
|  | yá(ne) | 'sister' | yá(ne) | yá(ne) | yá(ne) (a), yá(ne) (húe) |
|  | bahúe | 'elder Si' | pe=bahú | ke=bahúe | pe=bahúe, ke=bahúe |
|  | bafàng | 'younger Si | pe=baf | ke=bafàng | pe=bafàng, ke=bafàng |

These facts, combined with the widespread marking of grammatical gender throughout the grammar of the language, make it seem that the relative-age terms are later additions to an earlier system which was purely sex-based. The extensive contacts that the Skou people have with Austronesian speakers in Humboldt Bay, speakers of languages that have predominantly relative-age kin systems, might well be responsible for the grafting of such a system onto an existing sex-based system.

### 9.9.1 Kinship in Skou

The Skou kinship systems shows several points of interest to general linguistics, apart from the study of kinship systems in and of themselves. Three factors distinguish the set of kinterms from any other selection of nominals:

- almost all the inalienable nouns are kinterms;
- several terms have suppletive doublets specifying 1SG possession of non-1SG possession;
- several terms occur with a (near) obligatory specifying pronoun;
- several inalienable kinterms are homophonous with an alienable noun, distinguished only by the morphosyntactic environment in which they occur.
Despite the semantically unifying criteria that join the kinterms together as against other lexical items, it is true that there is no one over-arching grammatical criteria for distinguishing them. Nonetheless, they make a sensibly delimitable lexicographic unit that can be discussed fruitfully.

We shall first present the kinterms and their organisation, and then discuss the linguistically interesting aspects of their formation and use. A list and discussion of the homophonies can be found in 9.3.

Table 138. Kinterms

| Skou |  | Description of relationship | Grammatical notes |
| :---: | :---: | :---: | :---: |
| bahúe | eSi | elder sibling | must use specifying pronouns |
| bafàng | ySi | younger sibling | must use specifying pronouns |
| yá(ne) | Z | sister | inalienable |
| yu(ne) | $\begin{aligned} & \text { B, MZC, FBC } \\ & \text { (= parallel } \\ & \text { cousins) } \end{aligned}$ | brother, parallel cousins: mother's sister's children, father's brother's children | inalienable |
| lálà(ne) | $\begin{gathered} \text { FZC, MBC } \\ \text { (= cross } \\ \text { cousins) } \end{gathered}$ | cross-cousins: father's <br> sister's children, <br> mother's brother's children | inalienable |


| ánì | M | mother |  |
| :---: | :---: | :---: | :---: |
| ái | F | father |  |
| má(me) | oM | mother (not speaker's) | inalienable |
| re(me) | oF | father (not speaker's) | inalienable |
| titíí | FeB, MeZH | father's elder brother, mother's elder sister's husband |  |
| kóko | FyB | father's younger brother |  |
| kóko ueme | FyBW | father's younger brother's wife | analytical |
| wówo | MB, FZH | mother's brother, <br> father's sister's husband |  |
| tóeùe | MeZ, FeBW | mother's elder sister, <br> father's elder brother's wife |  |
| ánì pe bafàng | MyZ | mother's younger sister | analytical |
| fáfa | FZ, MBW | father's sister, mother's brother's wife |  |
| tata | PP, CC | grandparent, grandchild |  |
| yaya | PPP | great-grandparent |  |
| ku | C | child |  |
| è(ne) | W | wife | inalienable |
| páng(ne) | H | husband | inalienable |
| ílne) | SpF, DH | father-in-law, son-in-law | inalienable |
| là(ne) | HM | husband's mother | inalienable |
| tà (ne) | SpM, SW | mother-in-law, daughter-inlaw | inalienable |
| hóeto | $\begin{aligned} & \text { SpSi or } \mathrm{SiSp} \\ & \text { PSiCSp } \end{aligned}$ | brother-, sister-in-law, cousin's spouse |  |
| là(ne) | SpM | mother-in-law |  |

The Skou kin system can be seen to be two separate systems, operating in overlay. In many cases we cannot absolutely assign a term to one and only one system, since it has added an 'extended meaning' on to an earlier more restricted sense. The following pairs seem to strongly imply that there are two systems operating which have been spliced together.

- sibling terminology can refer to either an opposition between sex: yá(ne) 'sister' and yu(ne) 'brother', irrespective of relative age, or to relative age, bahúe 'elder sibling' and bafàng 'younger sibling', irrespective of sex;
- affinal kinterms appear to operate with two distinct systems, one involving relative age specification rather than sex, and the other involving sex specification rather than relative age.
There is also evidence, albeit slim, to suggest that the vertical kin relationships (such a parent, grandparent, child, grandchild), and kin relationships acquired through marriage, are more salient than horizontal kin relationships (such as cousin, sibling). The evidence involves a process of grammaticalisation that is taking place with the inalienable dative marker on certain kinterms; the data can be found in 9.3.


### 9.9.1.1 Verbs of acquiring kin

Having or acquiring kin is expressed in an adjunct nominal construction with the generic verb li 'do'. This is probably an extension of the child-bearing and marrying uses of the light verb.
ku tue
child 3SG.F.do
'bear a child'
(125) Pe yu-pe-pè=pe
pe=tue
3SG.F brother-3SG.F.DAT-3SG.F.GEN=3SG.F.DAT 3SG.F=3SG.F.do 'She has a brother.'

An alternative to this light verb strategy expressing kin 'ownership' can be found in a simple non-verbal clause, such as 126), which has an [ NP ] [ NP ] structure.
(126) Pe yu-pe-pè=pe=ing a áling.

3SG.F brother-3SG.F.DAT-3SG.F.GEN=3SG.F.DAT=the one
'She has one brother.'
('Her brother is one.')
Other kin relations that are particularly prone to being encoded with a light verb are shown in (127) - (128).
(127) ùe pung li marriage do 'marry'
(128) tanghang tue face 3SG.F.do
'bear a child'
Possessing kin that are generationally older than you cannot be coded with light verb constructions, and must use either predicative nominals, as in (126), or a statement of the continued life of that relative, as in (129) and (131).

```
(129)
    Yáya-nì=ne moeng li TeÓeti.
    PPP-1SG.GEN=1SG.DAT sit do Wutung
    'My great-grandfather is at Wutung.'
(130) * yáya-nì=ne ke=li (Te Ó eti)
    PPP-1 SG.GEN=1SG.DAT 3SG.NF=do Wutung
    'I have a great-grandfather (at Wutung).'
(131) Wówo-nì=ne moeng li TeTángpe.
    MB-1SG.GEN=1SG.DAT sit do Skou Yambe
    'My (maternal) uncle is at Skou Yambe.'
(132) * wówo-nì=ne ke=li
    MB-1SG.GEN=1SG.DAT 3SG.NF=do
    'I have a maternal uncle.'
```

In (130) the 'existential coding', as opposed to the light verb coding, is the only possibility regardless of the actual age of the referent. Even if the person in question was the speaker's mother's much younger brother, younger than the speaker, (132) will be ungrammatical.

### 9.10 Summary of issues to do with possession in Skou

The grammatical parameters that we need to consider in a discussion of the marking of possession in Skou are the following (although they are presented as separate points, they interact to a significant degree).

- location of possession: internal to the NP external to the NP:
- type of possessum: inalienable: use DAT-GEN=DAT marking strategy alienable: use -GEN=DAT marking strategy
The fact that these two factors could logically overlap does not create complications, since the 'type of possessum' factor is only relevant to internal possession.

XXXXXXXXXXXXX

## 10 Nominal Classification

Nominal classification, the linguistically overt division of the elements of the world into discrete (or not so discrete) classes, has been reported in several languages of New Guinea, such as Enga, Yimas, and Saweru (Lang 1975, Foley 1991, Donohue 2001b, respectively), and Skou too is a language that employs nominal classification as part of its linguistic code. While the realisation of the classification system is described elsewhere as it is relevant for other aspects of the morphology of Skou (see particularly chapters 6, 7 and 19), this chapter discusses the general notion of classification and the kinds of divisions that are made, with the morphological realisation of these divisions being of secondary importance.

### 10.1 Gender and classification

Gender is a pervasive feature in the morphology of the Skou clause, with all nominals being classed as feminine or non-feminine. This gender is realised on any pronominal reference that applies to that nominal. For instance, the choice of vowel on the verb in the following clauses monitors the gender of the object. In the first example the object, ke, is not marked as feminine gender, and so the generic form of the verb is used. In the second example the object is feminine, and the verb appears with the vowel alternations typical of verbs marked for feminine gender.
(1) Mè ke mè=fue na?

2SG 3SG.NF 2SG-see Y/N
'Can you see him?'
(2) Mè pe mè=fu na?

2SG 3SG.F 2SG-see.F Y/N
'Can you see her?'
When inanimate nominals are indexed on the verb, the same divisions are observed.
(3) Mè pìng mè=fue na?

2SG bow 2SG-see Y/N
'Can you see the bow?'
(4) Mè wá mè=fu na?

2SG carrying.basket 2SG-see.F Y/N
'Can you see the carrying basket?'
This chapter will deal with the type of nominal classification that is found in Skou, and the means used to realise it. A formal description of the type of agreement found on verbs is presented in 7.2. Here we shall deal mainly with the semantic bases for gender choice, and the ways in which gender marking is realised in the NP. Additionally, the type of system found in

Skou, which combines gender and number into the one classificatory paradigm, is discussed in a cross-linguistic perspective.

### 10.2 The classificatory divisions

There are several classificatory divisions that are relevant to a discussion of classification in Skou. To simply list them, we need to take into account the following four divisions, each of which is itself binary:
gender: feminine versus non-feminine
number: singular versus non-singular
animacy: animate versus inanimate
higher animacy: humans (and associated animates) versus non-human
The second classification, number, is fairly self-explanatory, and will not be discussed here in detail, except as it relates to the morphological realisation of gender: all non-mass nouns may appear with a different number of referents, and so this is obviously not a matter for lexical specification. Although number appears to be straightforward, and not the sort of ontological category that gender and the two animacy divisions are, it is bound into the system of marking gender, which is covariant also with animacy, as shall be discussed in 16.4. Systems of classification that treat number, as well as some semantic property of the nominal, in the same paradigm are not common, but neither are they unreported in the languages of the world. Kiowa (Watkins 1984: 79) is one such language.

Animacy, and higher animacy, are both straightforward categories; the category 'animacy' divides the word into sentient and non-sentient entities, without any complications: there are no biologically sentient entities that are classified as inanimate, nor any biologically non-sentient things that are classified as animate. The related category 'higher animacy' involves a basic division between humans, spirits, and sometimes animals associated with humans (dogs, pigs, cassowaries) and the animals of the bush or the water. This is clearly a more culturally determined category, not a biologically one, and more will be said about it. later.

The category most dependent on cultural, rather than strict natural-world criteria of shape, size or location, for its determination, however, is that of 'gender'. At the higher-animate end of the scale there is a clear biological basis for gender assignment, with the two genders correlating absolutely with the two sexes. At the lower end of the animacy scale, however, this biological basis is lost, and the two genders must be assigned according to a complex, but related, set of criteria. The factors that lie behind the assignment of gender to different nominals will be discussed in the following section.

### 10.3 The semantic and pragmatic bases of gender marking

A set of non-congruous principles lie behind the assignment of gender of nouns in Skou, but as guiding principles rather than absolutes. It is best to think of the discussion following in this section as representing the distillation of the introspections of various Skou speakers about the
gender system in their language, after the alternations were brought to their attention. ${ }^{51}$ This section, then, represents an idealisation of the principles that are prescriptively said to be behind the gender system, while 10.4 shall present data with lists of lexical items of various categories showing the operation of the gender division in practise. There are four categories of nouns relevant for determining the different principles of gender assignment. The nominal divisions that are relevant, showing different behaviour with respect to gender assignment, are:

- human and higher animate referents;
- inanimate items associated with humans;
- animate referents not closely associated with humans;
- inanimate referents not closely associated with humans.

These proposed divisions are ontologically relevant for the following reasons:

- Human referents do not have grammatically-assigned gender other than that associated with their biological sex (female $=$ feminine, male $=$ non-feminine), and so can in a way be thought of as participating in the system of grammatical gender less tightly than are inanimate objects, for which gender is purely grammatical. Various higher-animate non-humans, such as naké 'dog', or pále 'pig', are also assigned gender simply on the basis of their biological sex.
- Inanimate items associated with humans are assigned the gender of the human that usually used them: thus, tools and things associated with men are assigned nonfeminine gender, while tool $s$ and things associated with women are fixed with feminine gender. This means that the same real-world referent, with the same linguistic sign, may change grammatical gender as it is processed. The most salient example of this is hoe 'sago': this is non-feminine when it grows and as it is chopped down, as it is the domain of men to plant and harvest the sago trees. Once the sago is at the point where it can be processed by women (washing, packaging, cooking, and eating), the sago is treated as feminine (see 10.3.1). This should not be thought of as a fluid gender system, but rather as a series of lexical concepts that are all encoded with the one lexical item, but whose separate identity is clear from the fact that they are treated separately in the grammar. The different genders apply because of the different dynamics of oppositions in different cultural contexts.
Animate and inanimate nominals that are not treated as having biologically determined gender make up the 'conceptual' part of the classification system.
- Within the class of animate nouns, there are both feminine and non-feminine nouns, with the following broad criteria determining their membership:
- Feminine gender is associated with the more domesticated animals;
- non-feminine gender is associated with more 'wild' items and animals.
- Inanimate nouns that are closely associated with humans, such as body parts, are predominantly non-feminine, though both feminine dominates when the part of

[^24]the body is soft or smooth. Some examples of feminine and non-feminine body parts are shown in 10.4, table 142xxxxxxxxxx. There is a clear preference for feminine body parts being large, enveloping, smooth, or soft.

- The inanimate nouns that are not closely associated with humans are predominantly feminine, though both feminine and non-feminine occur. The following categories emerge:
- Feminine gender is associated with things that are associated with women or women's work, and with nature in general. There are plenty of counter-examples, but there is a tendency for less maninfluenced things to be feminine
- Non-feminine gender is associated with trees and other wild foods in their pre-processed state, and with dangerous things of the bush, or the more showy of birds. It is also associated with things that are the products of male endeavour, and the larger of two similar artefacts, when there are two structurally different versions (such as different pot types, for instance).
These general principles provide a road map for the principles behind gender assignment in Skou. The following sections will map out how these overlapping criteria are resolved in particular cases.


### 10.3.1 Underspecified gender: the case of hòe 'sago' and pa 'water'

Some nouns in Skou do not seem to have a completely fixed, lexically assigned, gender. One highly prominent noun (in terms of cultural relevance and frequency of use) is hoe 'sago', which illustrates the point that the nature of classification in Skou is not dependent on any broad semantic criteria associated with the nature of the object. This can be shown with a couple of examples.

When a sago tree is growing, whether it is in the wild or in a garden, it is referred to as hòe 'sago', and assigned non-feminine gender, as can be seen by the choice of non-feminine (unmarked) verb forms fue, i and li , with no vowel alternations or fused prefixal agreement on the root, in the following sentence.

```
Hòe nì=fue.
sago 1SG=see
'I saw the sago (tree or swamp garden, unprocessed, not cooked food, not
conceived of as food).'
```

(6) Hòe moeng i li fuea.
sago sit be do there
'The sago (tree or swamp garden, unprocessed, not cooked food, not conceived of as food) is over there.'

If the sago is processed, however, or is at the point in processing of being washed and rinsed by women, and especially if it has already been cooked and is being eaten, or is ready to be eaten, then it is referred to with feminine gender. This is shown by the use of vowel umlaut (fue $\rightarrow \mathrm{fu}, \mathrm{i} \rightarrow \mathrm{e}$ ) and in once case is combined with consonantal alternation due to underlying prefixation (li $\rightarrow$ tue).
(7) Hòe nì=fu.
sago $1 \mathrm{SG}=$ see. F
'I saw the (cooked, currently being processed, processed, or simply designated as edible) sago.'

```
Hòe mong e tue fuea.
sago F.sit 3SG.F.be 3SG.F.do there
'The (cooked, currently being processed, processed, or simply designated as
edible) sago is over there.'
```

Here the assumption of feminine gender can be attributed to the fact that sago is rinsed, carried back to the village, cooked and served by women: there is some degree of 'contamination' of gender onto the object that the feminine gendered women are having such close contact with.

In the case of pa 'water' we can see the opposite process: the wild state of sago is assigned the feminine gender, as can be seen from the choice of the form of the verb 'see', which marks a feminine object, and the feminine form of 'do' in the ko tue collocation, which is the feminine form. This is shown in (9). The ungrammaticality of these verbs appearing with non-feminine forms can be seen in (10).
(9) Pa nì=fu ko tue hángpeng. river 1SG=see.F be.at 3SG.F.do bush 'I saw the river in the bush.'
(10) * pa nì fue ko li

Ii do (neutral, including 3SG.NF)
Water in a non-natural state, however, is non-feminine. In the following sentence the choice of the verb root ké 'get', rather than the alternative wé, which specifies a feminine object, indicates that pa 'water' cannot be thought of as being feminine. Again, the ungrammatical sentence underneath shows that the use of a verb form specifying a feminine object is not grammatical.

Pa ke=ké k-á toe pá-pè=pe.
water 3SG.NF=get 3SG.NF-carry 3.come house-3SG.F.GEN=3SG.F.DAT
'He brought some water to her house.'

$$
\begin{gather*}
\text { * pa ke=wé } \begin{array}{c}
\text { 3SG.NF=get.F }
\end{array} \text { ká toe pá pè pe } \tag{12}
\end{gather*}
$$

Compare these sentences with unproblematically feminine nouns in the following two sentences, and the sentences with unambiguously masculine nouns in the next two.

## Feminine

| Tang | nì=fu | ko | tue |
| :--- | :--- | :--- | :--- |
| canoe | $1 \mathrm{SG}=$ see. | be.at | báng. |
| 'I saw a canoe at the beach.' |  |  |  |

(14) $\mathrm{Pe}=$ ueme nì=fu mong tue báng.

3SG.F=woman 1SG=see.F F.sit 3SG.F.do beach
'I saw a woman at the beach.'
Non-feminine
(15) Pá nì=fue moeng li bàme. house $1 \mathrm{SG}=$ see sit do village 'I saw the house in the village.'
(16)

| Ke=balèng | nì=fue | moeng | li pá. |
| :--- | :--- | :--- | :--- |
| 3SG.NF=man | 1SG=see | sit | do house |

'I saw the man in the house.'
Now, we could solve these sorts of classificatory quandaries by positing in each case two paired lexemes, which just happen to be homophonous. In the first pair we would have to posit the words hòe 'growing sago, NF' and hòe 'processed sago'; the second pair of examples would be accounted for by the lexical entries pa 'river' and pa 'water'. While feasible, any degree of linguistic intuition, as well as native speakers' judgements, indicates that there is lexical unity between hòe and hòe, pa and pa. As an alternative, we might suppose that there is a transfer of grammatical gender: the association with women preparing and cooking sago imparts feminine gender to an otherwise non-feminine nominal. What then of the water? If we were to make out judgement solely on the basis of the sentences seen above, we might suppose that the non-feminine gender of pa in (11) is due to the presence of a male subject in this sentence. This does not hold up in the light of sentences such as (17), in which the subject is feminine; again, the feminine object form of the verb ké 'get' (suppleted to wé, and inflected for third person singular feminine as pé, as seen in (18)) is not allowed. (19) and (20) show parallel data for a plural subject.

```
Pa pe=w-é p-ú toe
    water 3SG.F=3SG.F-get 3SG.F-3SG.F.carry 3.come
        pá-pè=pe.
        house-3SG.F.GEN=3SG.F.DAT
        'She brought some water to her house.'
    * pa pe=p-é pú toe pá pè pe
        3SG.F=3SG.F-get.F
    Pa te=kí t-ú toe
    water 3PL=3PL-get 3PL-3PL.carry 3.come
        pá-tè=te.
        house-3PL.GEN=3PL.DAT
        'They brought some water to their house.'
    * pa te=wé tú toe pá tè te
        3PL=get.F
```

Here we can only appeal to the general tendency for cultural items (as opposed to things that are part of the natural, non-human, world) to be marked masculine. We would need to assume that 'water' is inherently feminine, but that on transfer to the world of humans, whether the transfer is accomplished by women or by men, the non-feminine gender is applied. It might be worth noting that the Tami river ( Pa Ílong in Skou), the major river in the Skou part of the world, also marks the traditional border between the Skou land to the north and the land belonging to the Wutung, Musu and Nyao to the east, and the Elseng and Awyi to the south (see map 2 in chapter 1). This means that the river marks the border of the known and unknown, the controlled and the uncontrolled.

Assigning feminine gender to such an obvious marker of the non-human, non-cultural world is not surprising. Inanimate nouns that are not closely associated with humans are generally marked as non-feminine. There are exceptions to this; these exceptions involve very visible and important natural features, such as mountains, islands, the sea and capes, and these
are discussed in more detail, along with the organising principles behind these assignments, in the following section.

### 10.4 The lexical distribution of gender

The following tables, while being a long way from exhaustive listings of the membership of each semantic group, give an impression of the lexical items that are classified into the different gender classes in Skou. Rather than simply listing members of the different genders in each different semantic field, they are arranged to try to show functional oppositions, based on informants perceptions, on cultural practises, or on physical similarities. In those cases for which there appears, for one reason or another, to be an opposition existing between a feminine and a non-feminine noun (or group of nouns), they are listed on the same line. Otherwise, when there is no obvious relationship between two nouns, they are listed on separate lines. More details of the lexical items presented here can be found in appendix 1.

Table 139. Feminine and non-feminine gender oppositions in land animals

| Semantic field | Feminine nouns |  | non-feminine nouns |  |
| :---: | :---: | :---: | :---: | :---: |
| Animals | ya ápátàngpang 'animal' |  |  |  |
|  | pále | 'pig' | naké | 'dog' |
|  | púru | 'tree kangaroo' | pumà | 'wallaby' |
|  |  | ' $¢$ sugar glider' | púpí | 'O' sugar glider' |
|  | púfàue | 'cuscus (sp.)' | púbà | 'cuscus (sp.)' |
|  |  |  | púbèng | 'cuscus (sp.)' |
|  |  | 'snake' | ífóngta | 'giant goanna' |
|  | íwúng | 'snake (sp.)' | fongtà | 'green tree lizard' |
|  | íméri | 'snake (large)' |  |  |
|  | ingéngong | 'cat' | kíngue | 'green tree frog' |

The generic term for '(land) animal', yaápátàngpang, is feminine, but there is a nearly perfect set of oppositions within the field that is most clearly realised in the sugar glider terms, púwa and púpí, which both refer to complete species, but which are mythologically paired. Púwa, then, refers to both male and female members of the same species, as does púpí refer to all members of that species. Tree kangaroos obviously pair with (ground) wallabies on physiological grounds, with the tree-dwelling púru taking feminine gender, probably by association with trees, which are also feminine, and by virtue of their smaller size. Snakes and lizards provide another opposition, with the ground-dwelling characteristic of snakes serving to anchor that class in feminine gender, by association with the ground, which is feminine. Snakes are also, perhaps surprisingly, considered to be squat, creatures: they are most typically found coiled up, and so most often present a round shape. The cat versus frog opposition is tentative, but both these animals can be treated similarly as animals that are not eaten. These two may well turn out not to be an opposition, but simply happenstance members of opposite genders. Before all these oppositions, however, the pig:dog opposition is the most important. The pig is the archetypal bush animal: there is little animal husbandry in the Skou area (see 1.3), and most pig were traditionally taken from the bush, or in trade. The dog, on the other hand, is the domesticated animal, used by men in hunting, and so serves as a functional opposite to the pig,
which is the culturally most important prey. Dogs and pigs are clearly paired in the Skou worldview, as antagonists.

Table 140. Feminine and non-feminine gender oppositions in birds

| Semantic field | Feminine nouns |  | non-feminine nouns |  |
| :---: | :---: | :---: | :---: | :---: |
| Birds |  |  | táng | 'bird' |
|  | pu | 'nest' |  |  |
|  | tángrángpoe | ' 12 -wired bird of paradise' | tángráng | '(raggiana) bird of paradise' |
|  | tángboe | 'crowned pigeon' | tángké,tangé tánglù | 'eagle (sp.)' |
|  | ojíng | 'chicken' |  |  |
|  | tángáue | 'sea tern' | pátángke | 'kingfisher' |
|  | tángná | '(white) | tángróepa | '(black) palm |
|  |  | cockatoo' |  | cockatoo' |
|  | tángkengkeng(wa) | 'small bat (sp.)' | tangóe | 'bat' |
|  | tángfí | 'small black bat' |  |  |
|  | tangwáue | 'bush turkey' | tángung | 'hornbill' |
|  | tangrue | 'cassowary' |  |  |

In the domain of birds we find that the cover-term is non-feminine, not the feminine that in the case for animals. This ties in with the use of birds as clan totems in Skou society. In opposition to this, however, is the feminine gender assigned to pu 'nest', reflecting female domestic roles (see 'tools' and 'house and home' below). The bird of paradise (tángráng is both a cover term for birds of paradise in general, and the species-specific name for the raggiana bird of paradise) is non-feminine as a clan totem, though the 12 -wired bird of paradise, one of the smaller of the prominent birds of paradise, is feminine in opposition to it. Eagles, which both symbolise hunting (a male domain) and fly high in the sky (near the sun - non-feminine), typically (in the Skou area) soaring on winds from the north (the sea - non-feminine) as they hit the hills near the coast, are non-feminine, while the largest other typical bird is the victoria crowned pigeon, which due to its round shape is assigned feminine gender. The oppositions between the water birds, with kingfishers (with their long beaks) being non-feminine while the more squat sea term in feminine is clearly shape-based, and the colour difference that separates the two cockatoo species names reflect the feminine status of the moon and the masculine status of the sky and stars; the longer beak of the palm cockatoo further adds to the structural differences between the two species. Longer bills, and an aggressive nature, lead to the hornbill also being classed as non-feminine, while the bat species are separated on size grounds. The cassowary is grouped as a feminine bird (it is considered avian in Skou culture, and indeed in all the cultures descended from the proto-Macro Skou peoples (see figure 2, in 1.4), in contrast to its near-human treatment in many highlands New Guinea cultures) by virtue of its large, round, eggs, it's round body, the rounded crest on its head, and its stay-at-home characteristics. The bush turkey is also classed as feminine because of its habit of building nesting mounds, and its squat shape.

Table 141. Feminine and non-feminine gender oppositions in fish and water creatures

| Semantic field | Feminine nouns |  | non-feminine nouns |  |
| :---: | :---: | :---: | :---: | :---: |
| Fish | móe | 'fish' |  |  |
|  | kungpáue | 'octopus' | móema | 'shark' |
|  | páli | 'kraken' | móewú | 'barracuda' |
|  | móenòeng | 'crocodile' | móelíúe | 'dolphin' |
|  | kungwóue | 'hermit crab' | apále | 'crab' |
|  | kúng | 'small crab (sp.)' |  |  |
|  | lá | 'prawn' | le | 'shellfish’ |
|  | móeí | 'large turtle' | moelíue | 'small turtle' |
|  | moeláng | 'medium turtle' |  |  |
|  | (mos | fish species) |  |  |

Fish in general are a feminine biological category, and most fish species take feminine gender. The exceptions are the long, dangerous fish with teeth, such as sharks and barracuda (see the body parts section below, for 'teeth'), and dolphins, with their long noses. Crabs and shellfish are non-feminine, by virtue of their sharp edges, though smaller, more land-based species are feminine: the ground is feminine. The fact that small turtles are non-feminine might seem to run in the opposite direction to the normal male:female::large:small divisions that operate, except for the fact that the larger turtles are all rounder, and moreover are more likely to be seen laying eggs, a clearly female domain.

Table 142. Feminine and non-feminine gender oppositions in insects

| Semantic field | Feminine nouns |  | non-feminine nouns |  |
| :---: | :---: | :---: | :---: | :---: |
| Insects | tangbéro | 'butterfly' |  |  |
|  | tanbéro tútú | 'butterfly of good omens' |  |  |
|  | tangbéro | 'butterfly of bad |  |  |
|  | léngfi | omens' |  |  |
|  | lúng | 'fly' | hítong | 'blowfly' |
|  | tángrue | 'praying mantis' | ibábúeli | 'wasp' |
|  |  |  | yabíto | 'firefly' |
|  |  |  | óngmi | 'firefly' |
|  | pàng | 'bedbug' | loe | 'ant' |
|  |  | 'louse, flea' | óe | 'black ant' |
|  | fúnglìng | 'scorpion' |  |  |
|  | kungpáue | 'spider' |  |  |
|  | áli | 'leech' |  |  |
|  | ójá | 'hairy caterpillar' |  |  |
|  | óhóeha | 'sago grub' |  |  |

The insect world is predominantly feminine. The only consistently non-feminine insect groups are those that sting, such as ants, wasps and biting flies, or fireflies, which are too similar to both fire and stars, both non-feminine, to be counted as feminine. Other than these exceptions the natural world category seems to dominate the insect world, especially since no
insects can be domesticated (and so drawn, at least potentially, into the male, and thus nonfeminine, world).

Table 143. Feminine and non-feminine gender oppositions in plants

| Semantic field | Feminine nouns |  | non-feminine nouns |  |
| :---: | :---: | :---: | :---: | :---: |
| Plants | rí | 'tree' |  |  |
|  | yá | 'grass' | ta | 'elephant grass' |
|  | rílo | 'bud' | hí | 'weeds' |
|  | hang | 'coconut' | ìngno | 'banana' |
|  | ápólè | 'gnemon, tulip' | rángúeke | 'sweet potato' |
|  | póweng | 'gedi, aibika' | nále | 'taro' |
|  | póní | 'sayur paku' |  |  |
|  | poí | 'spinach' |  |  |
|  | óemòe | 'round red yam' | óe | 'yam' |
|  |  |  | óewa | 'long yam’ |
|  | káue | 'mushroom' |  |  |
|  | ríro | 'bark' |  |  |
|  | hangling | 'roots' | àno | 'tree with air roots' |
|  |  |  | béngue | 'cucumber' |
|  |  |  | pupúki | 'eggplant' |
|  | yú | 'breadfruit' | sangbíki | 'pumpkin' |

The world of plants is also predominantly feminine. There are two reasons behind this, firstly the fact that, as part of the natural world plants are in the feminine sphere, and secondly because the collection of most edible plants, and of most plants that are destined to become the materials used to make tools, is women's work. The exceptions tend to be either shape- or activity-determined: bananas, cucumbers, and long yams, which by virtue of their long, thin shape are non-feminine, and less obviously weeds and (not useful) elephant grass, which are traditionally cleared by men's work, and pumpkins and eggplants, both relatively recent imports which arrived with the coming of the (male) Malay traders to the Dutch capital Hollandia in the early years of the twentieth century.

Table 144. Feminine and non-feminine gender oppositions in body parts

| Semantic field | Feminine nouns |  | non-feminine nouns |  |
| :---: | :---: | :---: | :---: | :---: |
| Body parts | nòe | 'body' |  |  |
|  | húe | 'stomach' | háng | 'intestines (end)' |
|  | hi | 'faeces' | húe kukupa | 'intestine, small' |
|  | làng | 'foot' | tunghúbi | 'shin' |
|  | làngbi | 'knee' | lánghùe | 'calf' |
|  | lèng | 'hips' |  |  |
|  | nupá(ho) | 'armpit' |  |  |
|  | páwu | 'shoulder' |  |  |
|  | nòruerue | 'elbow' |  |  |
|  | nò | 'arm, hand' |  |  |
|  | nòmama | 'thumb' | nòkangkang | 'finger' |


|  |  | ròebi | 'head' |
| :--- | :--- | :--- | :--- |
| néko | 'forehead' | hángta | 'skull' |
| lúbi | 'eyebrow' | lúto | 'eye' |
| péngro | 'lip | kóeng | 'tooth' |
| loe | 'ear' | há | 'nose' |
| lóeri | 'snot' | loelóng | 'nostril' |
| òebi | 'cheek' | kóeti | 'throat' |
| yángue | 'boil' | kéng | 'neck' |
| hùng | 'vagina' | pang | 'pus' |
| nóng | 'breast' | òebi | 'penis' |
| bèngro | 'tail (of fish, | pú | 'testicle' |
|  | feminine birds (of animals, |  |  |
|  |  | and snakes)' <br> non-feminine <br> birds)' |  |

Most body parts, including nòe 'body' itself, are feminine. The exceptions are sex-basd (non-feminine òe 'penis' and òebi 'testicle' versus feminine hùng 'vagina' and nóng 'breast' are quite obvious) shape-based: fingers, long bones, the longer intestinal portion of the digestive tract, the neck, and teeth all fit in the longer, thinner prototype, and nose' is not far off, compared to the flatter, broader ears, cheeks and forehead, which are feminine. The rationale behind 'boil' and 'pus' appears to be shape-based (feminine items being rounder), and emphasising the presence of an opposition (pus as opposed to the boil being coded as a gender opposition). The two different terms for tails, bèngro and pú, nicely split into two genders based on the types of animals they occur with. The fact that bèngro is limited to fish and snakes, while pú describes the tails of mammals and legged reptiles might be thought of as representing a strictly formal classification (two words that translate as 'tail' reflecting two different body parts), but the fact that in the realm of birds there is a perfect split in terminology which is completely predictable based on the gender assigned to the bird in question makes it clear that the opposing genders of the two tail lexemes mirrors the gender of the animal that they are found with.

Table 145. Feminine and non-feminine gender oppositions in tools and artefacts

| Semantic field | Feminine nouns |  | non-feminine nouns |  |
| :---: | :---: | :---: | :---: | :---: |
| Tools | tá | 'arrow' | pìng | 'bow' |
|  | já | 'pig noose trap' |  |  |
|  | takúe | 'punji stakes' |  |  |
|  | núng | 'large handnet' |  |  |
|  | lòengma | 'path' | rè | 'bridge' |
|  | palang | 'water pot' | pa | 'kettle' |
|  |  | '(small) water pot' | lang | 'large pot' |
|  | taíngbe | 'money' | bòeng | 'basket/purse' |
|  | tangnófó | '(small) knife' | tangnófó tití | 'large knife' |
|  |  |  |  | 'fork' |
|  |  |  | anangbí | 'chopsticks' |
|  |  |  | ríoe | 'planks of wood' |
|  |  |  | lé | 'drum' |
|  | (most domestic tools and personal decorations) |  | kúci | 'marbles' |

Tools are also mainly feminine, because they are typically used in domestic settings. The obvious exceptions to this domestic use criterion, arrows, noose traps and punji stakes, are feminine by association with their prey, pigs, which are the archetypal feminine animal, even though they are used by men in this pursuit. The intrusion of feminine gender into the otherwise male world of hunting is to enforce the gender contrast in that sphere of living: since the participants are male, and bows (synonymous with 'war') is non-feminine, the arrows and other trapping tools are classified as feminine.

Table 146. Feminine and non-feminine gender oppositions in canoe parts

| Semantic field | Feminine nouns |  | non-feminine nouns |  |
| :---: | :---: | :---: | :---: | :---: |
| Canoes | tang | 'canoe' | tú | 'ship' |
|  | tangtó | 'front of canoe' |  |  |
|  | tangrúe | 'rudder' |  |  |
|  | wáng | 'sail' |  |  |
|  | tangta | 'outrigger pole' | tanghang | 'outrigger' |

Interestingly, terminology for parts of the canoe is predominantly feminine. Although the sea is non-feminine, and the crews of canoes are predominantly or exclusively male, the only part of a canoe that is non-feminine is the long, thin outrigger that runs outside the canoe proper. Tú 'ship (airplane)' is classified as non-feminine in opposition to the smaller feminine tang 'canoe (vehicle in general)', but all the other sea-going technology, canoes themselves included, are classified as feminine. This is an example of the Skou operation of dynamic oppositions: while we might make an argument that the canoe represents the human, domestic element braving the sea, and so should be part of the nonfeminine domain, the fact that the sea itself is classified as non-feminine, in opposition to the feminine land, means that the only way to create an opposition between the (natural world) sea and the (technological) canoes is by coding the canoes as feminine.

Table 147. Feminine and non-feminine gender oppositions in the house

| Semantic field | Feminine nouns |  | non-feminine nouns |  |
| :---: | :---: | :---: | :---: | :---: |
| House and | bàme | 'village' | pá | 'house' |
| home | tího | 'door' | úee | 'ladder' |
|  | tílong | 'doorway’ |  |  |
|  | hò | 'roof' |  |  |
|  | láho, fá | 'wall' | ràng | 'house poles' |
|  | pátáng | 'ceiling' |  |  |
|  | rápong | 'smoke' | ra | 'fire' |
|  | rawòng | 'coals' |  |  |

Houses, as the domain of domesticity, are mainly feminine. The exceptions are determined by shape: long thin objects, the house poles and ladder, are non-feminine. The house itself is non-feminine, probably by association with the men who construct the house, while the individual parts of the house are all feminine gender. Fire, usually employed in the house, is non-feminine, by association with the non-feminine sun (the similarity in phonological shape between ra 'fire' and ráng 'sun' is unlikely to be pure chance).

Table 148. Feminine and non-feminine gender oppositions in the natural world

| Semantic field | Feminine nouns |  | non-feminine nouns |  |
| :---: | :---: | :---: | :---: | :---: |
| Natural world | fítong | 'earth, soil' |  |  |
|  | hángpeng | 'bush, jungle' |  |  |
|  | ké | 'moon' | ráng | 'sun' |
|  |  |  | ha | 'star' |
|  | a | 'cloud' | pítang | 'sky' |
|  | fu | 'rain' | pítang pu i li | 'thunder' |
|  | fángfù | 'South wind' | (féng) bibi | 'North wind' |
|  | láng | 'East wind' | wá | 'West wind' |
|  | hóeng | 'valley' | pì | 'mountain' |
|  | bàng | 'beach' | já | 'sea' |
|  | tíná | 'salt' |  |  |
|  | pato | 'lake' | í | 'pool' |
|  |  |  | tío | 'large wave' |
|  | tí toto | 'small wave' | ó | 'wave' |
|  | wúng | 'stone' | piítu | 'island' |

The natural world is the classic domain of the feminine, being one of the primary oppositions that exist between the two genders, expressing the primary division between society and nature. The earth is considered feminine, as is the vegetation that grows on it. Nonfeminine parts of the earth are mountains and islands, from their shape, and small pools: these are non-feminine in opposition to the larger, rounder lakes which are feminine, and also because the prototypical 1 is a body of water at the lower end of a river, just before it enters the sea: it might be that the connection with the sea provides the non-feminine gender.

We can see that both genders are represented equally in most categories, which shows the basic Skou division of the world into equal parts of feminine and masculine in all domains, rather than have completely strict divisions. Nevertheless, the members of each semantic field
are not split between the two genders in a random fashion. The following principled oppositions can be seen to hold:

Table 149. The feminine:non-feminine opposition

|  | feminine | non-feminine |
| :--- | :--- | :--- |
| Sex: | female | male |
| Size: | small | large |
| Shape: | squat, round | long, thin |
| Domains: | natural | human, technological |
|  | life | death |
|  | production | destruction |
|  | stability | change |
|  | group | individual |
|  | chaos | safe |
|  | land | control |
|  | south, east | sea |
|  | night | north, west |
|  | moon | day |
|  | clouds, rain | sun, stars |
|  | sky |  |
|  |  |  |

Interestingly, these oppositions, while global, do undergo local reversals. This is allowed by the contradictory categories that are in opposition: the uncontrolled, natural world (and thus non-societal) feminine gender is associated with danger, but is also associated with groups and with life. How can this be reconciled? The solution lies in the notion of dynamic oppositions: while feminine is non-societal, and is the opposite of organised human society, it attracts the (non-feminine) individual, the controlling human, the destructive male. Skou myths and clan histories typically pair a lone male character with a pair of women. The group represents stability, though at the same time degeneration, while the individual represents the forces of change and the imposition of human culture. Canoes are an example of a controlling technology, which would be expected to be non-feminine gender, being assigned feminine gender. They sail the seas, which are non-feminine, and they are long, large, operate during the day. How then can their predominantly feminine gender be explained? The canoe is used at sea, but it only operates from land, and more importantly is launched from villages (the connection being so strong that houses are even made for canoes when they are under repair - see picture 8 at the beginning of this book). Canoes, then, are an expression of the extension of the land into the ocean, of human society into the changing, destructive, environment of the sea (the number of supernatural dangers found in the sea is quite impressive, and the sea is inaccessible for four months of the year due to the force of the wave that break).

Through this lies the thread of dynamic oppositions: there are different, and contradictory, rationales behind the assignment of feminine and non-feminine gender, and when applied to society we find that often a gender is assigned to things on the basis of the dynamic oppositions that they can bring. This reaches its ultimate expression in those nouns which change gender depending on which aspect of their existence and function is emphasised, such as sago changing from a non-feminine entity in its wild state (large, long, processed by male activity involving destruction and breaking), to a feminine one when processed and cooked (squat in
bundles or cooking pots, life-giving food, eaten in a group). Kóe 'sago pancakes, baked sago' are the sago product that is taken by individuals on journeys, because it is more readily packed and packaged, the one least likely to spoil: the non-feminine characteristics (requiring more manufactured technology to produce woks, frying pans or forno griddles, consumed individually, less subject to decay, more easily transported) determine that it alone of processed sago products should not take feminine gender.

### 10.5 The morphological realisation of gender

Gender in Skou, and the morphology of classification generally across languages, may be realised at the NP level, or on the head of the clause (if the clause is a verbal predicate), or on both. ${ }^{52}$ This section will discuss mainly the possibilities of realisation of gender and number in the NP, and the basis for the choice of marking gender or number on verbs. We shall only secondarily deal with the actual realisation of these categories on verbs, as they are discussed in more detail as part of the general discussion of verbs in 7.2.

### 10.5.1. G ender and number in the NP

On the NP itself gender is only realised if the NP is followed by a pronoun to summarise the features of the NP, and that is possible only if the head of the NP is both animate and serving as the A of the clause.

There are degrees of realisation of gender in the NP of a nominal, ranging from the obligatory to the impossible. The following scale applies:

- third person singular pronouns;
- certain inherently gendered nouns that must take gender specification;
- nouns that must appear with specified gender, but are not inherently tied to feminine or non-feminine;
- nouns that may appear with gender specified, but need not do so, and change sense when appearing with overt gender. Sub-parts of this optionally-specified set of nouns include:
- nouns that may appear with gender marking, but do not usually do so;
- nouns that may only appear with gender marking in a special context;
- nouns that do not appear with gender marking

In all cases the specification of gender is accomplished by the use of the appropriate pronoun initially in the phrase. Apart from the use of such a pronoun, there are two ways in which the gender of a noun phrase can be realised, if the noun is animate:

[^25]- use of a summation pronoun to show that the NP is the subject of its clause, which shows gender or number;
- appearance of a summation pronoun when the NP is part of a string of conjoined NPs which have been coordinated:
- if the combination is plural, then only plurality can be marked;
- if the combination is dual, then both dual number and gender can be marked
We can list examples of each of these categories, and note the conditions under which they appear with gender marking. The different conditions are arranged from most obligatory marking of gender to least.

1. third person singular pronouns must mark the difference between feminine pe and non-feminine ke.
2. some nouns, such as ueme 'woman', always appear with a specifying pronoun.

With ueme, the noun appears as either pe=ueme 'woman' or te=ueme 'women';53 the lexeme may not appear with the non-feminine pronoun: *ke=ueme, nor (as mentioned in 1.) without a pronoun: *ueme. The lexeme is thus specified as having feminine gender, but must have a gender category overtly marked.
3. other nouns with human referents must take gender marking, but are not associated inherently with either feminine or non-feminine
Examples of this include bafàng 'younger sibling', which may refer to an elder sister or an elder brother, but in either case requires the appropriate specifying pronoun: pe=bafàng 'younger sister' and ke=bafàng 'younger brother', respectively, or te=bafàng for plural reference: 'elder brothers and sisters'.
4. certain other nouns, more generic in nature, may appear with a specifying pronoun, but do not have to.
Examples are bà 'person', which may appear with the non-feminine pronoun to indicate 'man': ke=bà, but is highly marked with the feminine specifying pronoun: ?\#pe=bà, since there is a more explicit lexical item ueme 'woman', which would in almost all circumstances be used rather than this expression. Non-human nouns such as naké 'dog' are not normally marked as feminine or non-feminine in the NP, but if the gender of the animal is salient, it may be indicated: ke=naké 'male dog', pe=naké 'female dog' (and te=naké 'dogs'). In these cases the reference must be to a specific individual or set of individuals, and not to the class of entities as a whole, and the sex (or number) of that individual or individuals must be both clear and relevant
5. many nouns are lexically assigned to a particular gender, but do not mark this feature in the NP, and it is apparent only by examining verbal agreement patterns.
These include ha 'string bag', feminine, and pìng 'bow', non-feminine. Although these are gendered nouns, they do not appear with pronouns to show that gender: *pe=ha, *ke=pìng.

[^26]The categories established above need to be qualified somewhat in terms of the empirically attested categories that they represent. It is true that for all animate nominals we have the option of marking plurality (really nonsingularity) by means of a 3 PL pronoun procliticised to the head noun; in this sense one of the cells of the paradigm that defines the examples in 2., 3. , and 4. above is non-unique.

We should also note an interesting syncretism that arises when the gender categories that are used for animate entities are 'extended' to mark inanimates. The morphological system for animate referents marks feminine and non-feminine in the singular versus an undifferentiated plural. The same is true for inanimates, but the plural category for inanimates is identical morphologically to the feminine forms. In a sense, then the relationship of the gender category feminine to inanimate, nouns mirrors to some extent the relationship of the number category plural to animate nouns. It is also apparent that feminine inanimate nouns do not distinguish number. Table 150xx summarises this conflation of categories. Similar tables dealing with the marking of gender and number have already been presented as table xx in 7.2.3.

Table 150. Gender and number marking for animate and inanimate referents

| Semantic category |  | singular | plural |
| :--- | :--- | :--- | :--- |
| Animate | feminine | FEM | PL |
|  | non-feminine | NON-FEM | PL |
| Inanimate | feminine | FEM | 'FEM' |
|  | non-feminine | NON-FEM | 'FEM' |

While marking gender, or number, in the NP of the referent is optional in most cases, and accomplished by the use of pronominal specifiers in those cases where it is marked, all nouns with a feminine gender, or a plural number, mark those categories on verbs where the morphology is appropriate for distinguishing these categories. This is discussed in section 10.5.2 following.

### 10.5.2 Gender and number on the verb

The gender and number of the subject and object will be indexed on the verb of a verbal clause, in a variety of manners depending on what morphological forms the verb is capable of realising. 54 The morphological means used are not the same for both subject and object, reflecting the location of the different means of marking agreement for subject and object, rather than facts about gender and number itself. Table 151xx shows the positions in the inflected verb that may display gender and number features.

[^27]Table 151. Location of gender and number marking on the verb

|  | subject | object |
| :--- | :---: | :---: |
| proclitic | yes | - |
| prefix | yes | - |
| vowel alternation | yes | yes |
| suppletion | yes (INTR only) | yes |

Clearly subject marking is the locus of more morphological encoding of gender, but that is only because there are more positions on the verb in which subject is marked. Wherever object is encoded, then gender is marked, and so we can most accurately state that all agreement positions on the verb encode gender to the maximum extent possible.

### 10.5.3 Classification operating over gender and number

The classification system in Skou is not purely based on a set of semantic features, but is a combination of the more strict categorisation of nouns as feminine or non-feminine, over-ridden in part by their appearing as singular or nonsingular, and interacting with the animate/inanimate class.

### 10.6 Realisation of the animacy distinction

butterfly book 165 xxxxxxxxx
Although the primary morphological division in Skou nominal classification is found in the feminine/non-feminine/plural gender system, realised in verbal agreement and various NP-edge pronominal forms, factors concerning animacy also play a part in determining the morphological choices made in some contexts. In addition to this there are some domains in which animacy alone is behind the distinctions observed. We may demonstrate this with verbs of location. Compare the verbs used in the following examples, which covary with various semantic features related to the animacy of the subject:

| Páloe ko tue pá-nì=ne | tílóng. |  |
| :--- | :--- | :--- |
| terrace be.at | 3SG.F.do house-1SG.GEN=1SG.DAT | front |
| 'There's a terrace at the front of my house.' |  |  |

(22) Pále ro tue pá tílóng.
pig 3SG.F.stand 3SG.F.do house front
'There's a pig standing in front of the house.'

| Páng-né-nì=ne | moeng | li pá tílóng. |
| :--- | :--- | :--- |
| son.in.law-1SG.DAT-1SG. GEN=1SG.DAT |  |  |
| 'My son in law's at the front of the house.' |  |  |

These classificatory verbs are in a sense fluid; an animate entity may be referred to with an inanimate classifier, but only if it no longer displays the characteristics that are typical of an animate one (namely, life).
Pále ko tue pá tílóng.
pig be.at $\quad$ 3sG.F.do house front
'There's a dead pig in front of the house.'

In the case of the 'be at' verb there is no variation for number or gender of the subject, but the animate-referring verb of location, moeng 'sit', does distinguish feminine and non-feminine forms as well as a distinct plural, formed by vowel alternation. Of course, verbs with animate subjects also take pronominal proclitics to further identify the features of their subjects.

Table 152. Verbs of physical location

|  | Gender feminine non-feminine |  | Plural | Alternatives |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Inanimate | ko | ko |  | be, do |  |
| Animate | mong | moeng | meng | be, do | postural verb <br> if appropriate |

The postural verbs that have been observed with locational senses are only used with the referents that are towards the higher end of the animacy scale. These verbs are rue 'stand' and i 'lie down, be', which join the more highly grammaticised moeng. Examples of the use of the postural verbs as verbs specifying location are shown in the following sentences. (25)b and (25)c differ from (25)a in that they imply a longer period of time; they do not, however, presuppose a particular postural state for the referent, but rather the possibility of that posture having been attained (hence the implication that the period of time spent at the location is longer than simply transitory).


Of these alternative verbs, rue is also available to be used as a support verb for adjectival predication, as long as the adjective can be construed as being related to the idea of standing in some way. In this case the appropriately inflected verb of doing added as well, as in the following example. Note that, since this is an adjectival predicate, there is no pronominal clitic on either the verbs or the adjective.
Ku-nì=ne rílele ro $\quad$ ro tue.
child-1SG. GEN=1SG.DAT short 3SG.F.stand 3sG.F.do
'My daughter is (still) short.' (implication: she hasn't grown much yet, she is
still young)

This usage is completely ungrammatical with i 'lie down', since there is no obvious association between the measure of tallness and the action of lying down.

$$
\begin{array}{llll}
\text { * ku-nì=ne } & \text { rílele } & \text { e } & \text { tue. }  \tag{27}\\
\text { child-1SG.GEN=1SG.DAT short } & \text { 3SG.F.lie.down } & \text { 3SG.F.do }
\end{array}
$$

Another reason behind the ability of this construction to appear with verbs of standing, but not with verbs of lying down, has to do with a possible inchoative interpretation. In the unmarked case a person moves from lying down to standing by volition, while moving from a
standing posture to a lying down posture can happen either volitionally or non-volitionally. In other words, there is less surprising about the assumption of a lying posture, while a standing posture is more unusual. If an adjectival predicate is being expressed with a posture verb, rather than non-verbally or simply with an inchoative sense marked with li 'do', then a marked aspectual interpretation is associated with that coding (see the translation of (22)). The standing verb is associated with a marked reading, and so is more suitable for the function.

We also find the animate/inanimate distinction on attributive adjectives. Normally an adjective appears with no special morphology in any position, but it may appear, when attributive, with a marker for animate referent, bà=. This is transparently derived from the word for 'person', bà, but its grammaticalised use in this context can be established as distinct from the nominal use. The animate adjectival prefix is found on a predicative adjective even when the noun phrase on which it is predicated contains the noun bà 'person' itself, as in the following:

$$
\begin{align*}
& \text { Ke=bà=ing ar bà=tété. }  \tag{28}\\
& \text { 3SG.NF=person=that ANIM=important } \\
& \text { 'That man is important.' }
\end{align*}
$$

It might still be argued that this sentence should be more properly translated 'That man is an important man.', with the glossing as shown in (25).

Putative reglossing and retranslation of (24)

$$
\begin{equation*}
 \tag{29}
\end{equation*}
$$

Five facts argue against the interpretation in (29). Firstly, when asked to translate the difference between 'That man is important.' and 'That man is an important person.', speakers are unhesitating in their agreement that (28) has an adjectival predicate, while the nominal predicate translation given for (29) is translated as (30).

Nominal predicate

| Ke=bà=ing a | ke=bà | tété. |
| :--- | :--- | :--- |
| 3SG.NF=person=that | 3SG. $\mathrm{NF}=$ person | important |
| 'That man is an important person.' |  |  |

Secondly, the fact that the morpheme has extended in use from the nominal reference for humans to a more general animate use can be seen from the following examples, in which it clearly does not refer to a human being. In the first example a dog is the head of the NP in which bà appears, and in the second a snake, both clearly not human.

$$
\begin{array}{ll}
\begin{array}{ll}
\text { Naké-nì=ne } & \text { bà= uefa=ing a } \\
\text { dog-1SG.GEN=1SG.DAT } & \text { ANIM=old=the }
\end{array} \\
\begin{array}{ll}
\text { ke }=\text { moe } & \text { k-a tà. }
\end{array} \\
\text { 'SG.NF=return } & \text { 3SG.NF-walk running } \\
\text { 'My old dog's running home.' }
\end{array}
$$

í bà=uefa nì=fue, ke=moe k-a tà.
snake ANIM=old 1SG=see 3SG.NF=return 3SG.NF-walk running 'I saw a big (old) snake, and it slithered away quickly.'

The next examples demonstrate the contrast between an animate subject, nì 'I', and an inanimate subject, ha we 'this bag', with the same adjective. The class marker bà can only appear with animate subjects, with which it is obligatory, and cannot appear with an inanimate
subject. In (33) we can see a sentence with an animate subject and the class agreement marker on the predicative adjective; the lack of this agreement marker, shown in (35), is ungrammatical.
(33) Nì bà=fèng.

1SG ANIM=bad
'I'm no good.'
(34) $\mathrm{Ha}=\mathrm{we}$ fèng.
bag=this bad
'This bag is no good.'
(36) * ha we bà fèng

The sentence in (33) should be parsed with bà taken to be a clitic on the adjective, and should not be parsed as shown in (37).

Possible mis-parsing of (29)

| Ni | bà | fèng. |
| :--- | :--- | :--- |
| 1SG | person | bad |

'I'm a bad person.'
A third piece of evidence for this analytical position lies in the tonal patterns: while bà and fèng both realise underlying HL tone melodies, in (33) the two syllables show a H HL pattern, while in (37) both syllables have a falling tone. This conforms to the difference in boundaries that is postulated for the two sentences (see 2.3.1 for more discussion of tonal behaviour, including the $\mathrm{HL} \rightarrow \mathrm{H} / \ldots \mathrm{HL}$ sandhi rule).

Fourthly, we should note the paraphrase

| Nì | bà=fèng | rue | li. |
| :--- | :--- | :--- | :--- |
| 1SG ANIM=bad | stand | do |  |
| 'I'm no good.' |  |  |  |

This paraphrase, of a predicate headed by a non-verbal word (here an adjective), as a verbal predicate which has an adjective complement is only possible for adjectives, and is not found with NPs. Relative clauses formed from adjectives with light verbs are rejected when interpreted with the plain adjectival reading, though in some cases alternative readings are possible, and grammatical.

| ke= bà | (* bà=) fèng=ing a |
| :--- | ---: |
| 3sG.NF=person |  |
| 'the bad man' |  |


| ke=bà | [RC (* bà =)fèng | r | li ] =ing a |
| :---: | :---: | :---: | :---: |
| 3SG.NF=person | ANIM $=$ bad | stand | do=the |
| * 'the bad man' |  |  |  |
| 'the man who's | nding badly' |  |  |

Finally, when asked to translate Skou predicative adjectives into Papuan Malay we find that translations of bà= 'animate class marker' appear, with orang 'person', as in the following examples.

Human referent

| Laki | baru | lari | cepat | itu | orang |
| :--- | :--- | :--- | :--- | :--- | :--- |
| man | just.now | run | quick | that | ANIM/person |
| tired |  |  |  |  |  |

'The man who was just running quickly is tired.' (NOT 'The man who was just running quickly is a person who is (habitually) tired.' or (necessarily) 'The man who was just running quickly is a tired person.')

Non-human referent (compare with (41))

| Sa=pu | anjing orang tua | itu | lari | kembali | di | rumah. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1SG=POSS $\quad$ dog ANIM old | that | run | return | LOC | house |  |
| 'My old dog's running home.' |  |  |  |  |  |  |

As can be seen, orang is used regardless of the human or non-human status of the referent, as long as it is animate. Clearly the use of bà= in examples such as (29) or (34) is as a grammaticalised class marker, not simply with the sense of 'person'.

### 10.7 Relics of a more complex system

There is some evidence that the animate/inanimate classification system described in the preceding section is a relic of an earlier, more complex system. Examine the following sentence. Here we can see the use of rí 'tree' as an apparent classifier for líhi 'garden', just as bà 'person' and ya 'thing' are still productively used in common speech.

$$
\begin{align*}
& \text { ne=r-óe-róe } \quad \text { líhi } \tag{43}
\end{align*} \quad \text { ri=rong=pa. }
$$

Unlike the use of bà 'person' and ya 'thing' as classifiers with adjectives, however, examples such as that above are not reproduced under direct questioning or in other elicitation settings, despite being occasionally found in the spontaneous speech of older people. For these reasons, then, is likely to 'repeat' her or himself with one of the sentences in (44) when questioned about the sentence in (43) a speaker, even if it is the same speaker who produced the initial utterance.

> a. ? Ne=r-óe-róe líhi $\quad$ ya=rong.
> 1PL=1 PL-get.PL-RED garden thing=old
> 'We get them all from the old garden.'
b. Ne=r-óe-róe líhi rong.

1 PL=1 PL-get.PL-RED garden old
'We get them all from the old garden.'
In the optional use of bà= and ya= we are observing the last vestiges of a once more elaborate classification system. We cannot know how extensive this system was, in terms of the degree to which it was marked on different elements of the clause, or in terms of the number and nature of the categories that were differentiated, though there are clues. While the only productive predicative classifier we observe with adjectives is bà=, and there are sporadic occurrences of ya=, a number of other generic nominals are found in patterns that suggest earlier classification. In 2.3.1.3 we discussed the use of the generic roots such as móe 'fish', táng 'bird', and tàng 'blade' with more specific lexemes to form new words. That is, although the only meaning ascribable to nòeng is 'crocodile', it never appears without the classifier móe:
móenòeng. With other lexemes we can observe a strong, but not complete, tendency for the generic classifier to appear in any predicative constructions involving adjectives as well. This can be seen in (45). While both the a . and the b . sentence are acceptable, (45) a is more naturalsounding to Skou people.
a. Tángná=ing a táng tútú.
cockatoo=the bird white
'The cockatoo is a white bird.'
b. Tángná=ing a tútú.
cockatoo=the white
'Cockatoos are white.'
Although the generic noun appears in predicative adjective constructions, it would be very unusual for it to appear with an NP-internal attributive adjective, illustrated in (46). The only likely interpretation of $(46)$ b is that there are two appositional NPs, tángná and táng máki ing a, referring to the same object and the second one clarifying the first (possibly for the benefit of the inexperienced listener, who might not be familiar with which cockatoo was being referred to, the smaller white species or the larger black species).

| a. | Tángná | má | nì |
| :---: | :---: | :---: | :---: |
|  | cockatoo | big=the | 1SG=see. |
|  | 'I saw a big cockatoo.' |  |  |

b. [np Tángná : táng máki=ing a] nì=fu.
cockatoo bird big=the $1 \mathrm{SG}=$ see. F
'I saw a cockatoo, a big bird.'
*/\# 'I saw a big cockatoo.'
The behaviour reported for rí 'tree' in (43) is not found under elicitation, and so the degree to which the classification system persists for attributive adjectives cannot be easily checked in the absence of a large corpus of naturally-occurring spoken material. Generic nouns that display the preferences shown here in (45) and (46) include:
à 'rope' (rarely, with ropes, strings, or things made from string);
bàng
'yesterday' (with days of the week);
hang 'coconut' (with things associated with coconuts, but only occasionally, and with considerable hesitation, with other round objects that take hang- as their specifier);
kung 'crab' (with all crustaceans, but not octopi, spiders or shells);
móe 'fish' (with water creatures, but not with crocodiles);
pa 'water' (with rivers, ponds, or the ocean);
pìng 'war' (with arrows);
pó 'vegetables' (with all vegetables, including those that do not take pólexically, such as pupúki 'eggplant');
rí 'wood, tree' (with all trees, including the vast majority of tree species names that do not take rí- lexically, and with anything made of wood and longer than it is wide);
tang 'canoe' (with any vehicle, including those that do not take tang- lexically, such as tujíngpa ‘airplane');
táng 'bird' (with any bird species);
tàng 'blade' (with any manufactured bladed instrument);
Illustrations of some of these patterns are given in (47) - (56), in addition to (43) - (46). Note that from examples such as (47)a we can clearly tell, from the HL tone pattern on à and the LHL on héfèng, that there are two distinct words, and that à is not prefixed or procliticised to héfèng. Note that in (47)a it is, in some abstract grammarian's sense, possible for the sentence to be interpreted as meaning 'Your basket is good string.', but this is not a reading that would be accepted by any speaker.

```
a. Bòeng-mè=me=ing a à héfèng.
    small.basket-2SG.GEN=2SG.DAT=the string good
    'Your basket is good.'
#! 'Your basket is good string.'
```

b. Bòeng-mè=me=ing a héfèng.
small.basket-2SG.GEN=2SG.DAT=the good 'Your basket is good.'

Note that it is not normally felicitous to simply repeat a nominal subject as a nominal predicate. Thus, compared to the naturalness of (47)a and $b,(48)$ is unequivocally infelicitous. This shows that the use of the relic classifiers cannot simply be dismissed as a discourse preference.
(48) \# Bòeng-mè=me=ing a
small.basket-2SG.GEN=2SG.DAT=the small.basket good
'Your basket is a good basket.'
The next examples show that while the relic classifier hang can be used with genuine coconut-related etyma in a natural fashion, using what is most likely the same original lexeme with a significantly shifted meaning, as in (50), is not really acceptable. Just as (47)a can, technically, be interpreted in a nonsensical way, so too could (49)a technically, to a grammatically-minded speaker, be interpreted as meaning 'That coconut shell is a big coconut.' In practise, however, (49)a will be translated into Papuan Malay identically to (49)b, as Itu tempurung besar 'That coconut is big.', and not *ltu tempurung kalapa besar.
a. Hangkúe=fue a hang máki.
coconut.shell=that coconut big
'That coconut shell is big.'
\# 'That coconut shell is a big coconut.'
b. Hangkúe=fue a máki. coconut.shell=that big 'That coconut shell is big.'
c. \# Hangkúe=fue a hangkúe máki. coconut.shell=that coconut.shell big 'That coconut shell is a big coconut shell big.'
a. Hangkúe=pè=pe máki. kneecap=3SG.F.GEN=3SG.F.DAT big 'Her kneecaps are big.'
b.*/\# $\begin{aligned} & \text { Hangkúe=pè=pe } \\ & \text { kneecap=3SG. F. GEN=3SG. F.DAT }\end{aligned}$ hang máki.
kneecap=3SG.F.GEN=3SG.F.DAT coconut big
'Her kneecaps are big.'

* 'Her kneecaps are big coconuts.'

The examples with rí and pó that follow show that the morphological presence of the relic classifier etymon in the noun is not necessary for the relic classifier to appear.
a. Hòe=fue a rí ikáféng.
sago=that tree tall
'That sago (tree) is tall.'
'That sago (tree) is a tall tree.'
b. Hòe=fue a ikáféng.
sago=that tall
'That sago (tree) is tall.'
c. \#! Hòe=fuea hòe ikáféng.
sago=that sago tall
'That sago (tree) is a tall sago (tree).'
(52)
a. Sangbíki pó langpí.
pumpkin vegetable delicious
'Pumpkins are delicious.'
'Pumpkin is a delicious vegetable.'
b. Sangbíki langpí.
pumpkin delicious
'Pumpkins are delicious.'
c. \#**! Sangbíki sangbíki langpí.
pumpkin pumpkin delicious
'Pumpkins are delicious pumpkins.'
a. Ojíng táng hápa.
chicken bird small
'Chickens are small.'
'Chickens are small birds.'
b. Ojíng hápa.
chicken small
'Chickens are small.'
This leaves both a large number of lexical items that, in the modern language, lack a classifier, such as wúng 'rock'. At the same time it also leaves a large number of specifiers that are not used in the classifier-like manner shown here include hòe 'sago', nò 'hand' and pá 'house'. The ungrammaticality of their use as relic classifiers can be seen in ((54xxxx) - (56).

> a. * fáti=fue a pá hápa
> hut=that house small
> 'That hut is small.'
b. Fáti fue a hápa.
'That hut is small.'
a. * kóe=fue a hòe langpí
sago.pancake=that sago delicious 'That sago pancake is tasty (sago).'
b. Kóe fue a langpí.
'Sago pancakes are tasty.'
c. Kóe=fue a yayong langpí.
sago.pancake=that food delicious
'That sago pancake is delicious (food).'
a. * nòmama nò bápáli.
thumb hand big
'Thumbs are big.'
b. Nòmama bápáli.
'Thumbs are big.'
c. Nòmama nòkangkang bápáli. thumb finger big
'Thumbs are big fingers.'
Comparatively, I'saka has tendencies that might be labelled as the relics of a classification system, though the form and divisions appear completely different to what we see here in Skou, and are, in I'saka, most likely a morphological device acquired as a result of the language's location in the Pual basin and contact with the other languages that can be found there (Donohue and San Roque 2004).

### 10.8 Summary: the morphological realisation of gender and animacy

In this chapter we have seen that the ontological categories of gender, number, and animacy class are bound together in a complex set of motivations and morphological possibilities. Table 153 xx summarises the information in this chapter.

Table 153. Morphological realisations of classificatory systems

|  |  | NP head | Modifier | Predicate |
| :---: | :---: | :---: | :---: | :---: |
| Class: | Animate | option for specifying pronouns | adjective may take bà = | choice of ro or moeng as locational verb |
|  | Inanimate | - | - | use of ko as locational verb |
| Gender: | Feminine | specifying pronouns and | - | use of vowel ablaut |
|  | Non-feminine | summation pronouns | - | - |

We can see a lot of skewing in the representation of the classification system in different discourse functions, a skewing that does not accord with cross-linguistically attested norms. Specifically, there is very little marking on modifiers, which is where a gender distinction is most commonly realised. One particular feature of the system is the complex interaction of gender (feminine vs. non-feminine), animacy and number, whereby the marking used to indicate singular plural in animate referents is used to mark plural with inanimate nouns.

A similar system is found in the (so far presumed) unrelated language Saweru, from Cenderawasih Bay. In this language, too, the 3SG.F prefixes are used with inanimate (or very low animate) nouns with a singular sense, while the 3SG.NF prefixes take a plural reading with these nouns. With animate reference, these prefixes are restricted to the singular, and there are separate plural prefixes. This can be seen in the following examples, where the 3 SG.F $\mathrm{mo}=$ is used for singular reference and $f 0=$, the agreement marker that is normally used with singular reference with humans, appears to mark the plural with inanimate references. With animate reference we can see that the separate marker $\mathrm{y} 0=$ is used for plurals.

Saweru: inanimate

| Kadera | mo =tami | iri | watuny=ai. |
| :--- | :---: | :---: | :--- |
| chair | 3SG. $\mathrm{F}=$ be. at | LOC | house=OBL |

Kadera fo=tami iri watuny=ai. chair 3SG.NF=be.at LOC house=OBL 'There are chairs in the house.'

Saweru: animate
Kaer fo=tami iri unat=ai. bandicoot 3SG.NF=be.at LOC mountain=OBL 'The male bandicoot is on the mountain.'
Kaer mo=tami iri unat=ai. bandicoot 3SG.F=be.at LOC mountain=OBL 'The female bandicoot is on the mountain.'
(61) Kaer yo=tami iri unat=ai. bandicoot $3 \mathrm{NSG}=$ be.at LOC mountain=OBL 'The bandicoots are on the mountain.'

The semantic basis of the Skou gender system follows many of the widely attested universals, in terms of being (variously) shape-based, cultural usage based, size-oriented, and connected to perceived mythological domains, throughout relating to the primary opposition between the female natural world and the male social world. But in addition to these general principles for assigning gender, which can be seen to be valid as organisational principles because of the existence of some lexical items which are assigned different grammatical gender based on the stage in the production or socialisation cycle that they are in, there is also the principle of opposition. There are many nouns whose gender appears to contradict the general principles that operate for the majority of nouns; indeed, one semantic field, the class of lexemes associated with canoes, is entirely the opposite of what might be expected from any of these general principles. Here we can only invoke the idea of dynamic opposition as an organising principle in the Skou gender system, a principle that is at least as important as the size-, shape- and function-based principles.

## 11 Non-subcategorised participants

### 11.1 Non-subcategorised participants and obliques

In addition to the (maximally two) arguments that are subcategorised for by the main verb in a clause, other nominals may be present. Any additional arguments that are present will be coded with some form of oblique marking. The various means used to mark an NP as serving a role other than subject or object of a clause are:

- postverbal rather than preverbal position;
- the use of a case marker;
- the use of 'applicative' marking on the verb;
- the use of a serial verb construction.

In many instances more than one of these strategies will be combined to mark the one nominal. Of the three techniques, only that of marking with the instrumental case, is unambiguous as a means of marking oblique status. The postverbal position is used to code the objects of certain low-transitivity clauses, and the applicative marker is a device that creates objects from goals, and is thus a marker of a previously oblique role.

Nominals serving syntactically as adjuncts may appear with a variety of roles in the clause. The semantic roles that are morphosyntactically differentiated are:

- beneficiary
- instrument
- location
- goal
- source

Examples of the appearance of each of these different semantic roles in English sentences are as follows, with the semantic roles shown above presented in bold. The semantic roles are shown in the same order as the list above.
(1) They made it for me.
(2) He used an axe to fell the tree. / He felled the tree with an axe.
(3) She put it on the platform.
(4) I went to the river.
(5) She came from Jayapura.

In all cases the nominal shown in bold above is not subcategorised for by the verb: the clauses are all grammatical without the use of the bolded phrase. Nevertheless the bolded phrases may be placed in the clause to further specify the predicate. Not all verbs allow for any extra obliques, and it must be emphasised that although we can conceive of some oblique arguments being essential to all events (all actions must happen somewhere, and the action of coming inherently implies a source where the referent cam from). In Skou many of these semantic roles may be expressed in more than one morphosyntactic device, just as the instrument in (2) may be coded either as the object of the verb, or as the object of a preposition, reflecting different discourse structures. The different ways of marking the different oblique semantic roles in Skou will be examined one by one for the kinds of morphosyntax they may employ, showing a range at least as great as that found in English.

### 11.2 Postverbal obliques

Most obliques occur immediately following the verb without any case marking, unless they have been coded in a topical position (the exception is instruments, for which see 11.8). Although they follow the verb, there are different positions for different kinds of obliques, depending on their relative position with respect to any auxiliary verbs: goals precede auxiliaries, while locations follow them. This is shown schematically in (6).
(6) ( $\mathrm{NP}_{\text {SUBJ }}$ ) ... V (GOAL/BEN/INSTR) $\mathrm{V}_{\mathrm{be}} \mathrm{V}_{\mathrm{do}}$ (LOCATION)

Examples of clauses with goals or locations as obliques can be seen in (7) and (8).
Goal
(7) Fetànghapa ke=ti À bi.
morning 3SG.NF=3SG.NF.go Abepura
'He went to Abepura this morning.'
Location
(8) $\mathrm{Te}=a n g k u=f u e \mathrm{a}$ nà te=oe báng.

3PL=child=that play 3PL=play beach
'Those children played on the beach.'
Evidence that these two postverbal obliques are in fact coded differently comes from examples such as (9) - (10), in which the clause contains auxiliary verbs. The goal can only be coded preceding the auxiliaries, while a location can only be coded following them.

Goal: pre-auxiliary
(9) $\mathrm{Pe} \quad \mathrm{pe}=\mathrm{w}$-a tà

3SG.F 3SG.F=3SG.F-walk running 3SG.F-go.seawards 3SG.F.go báng e tue. beach 3SG.F.be 3SG.F.do 'She ran down to the beach.'
(9)' * pe pe wa tà po te e tue báng

Location: post-auxiliary
María pe ya pe=w-á w-i e tue
Maria 3SG.F thing 3SG.F=3SG.F-count 3SG.F-count 3SG.F.be 3SG.F.do bàme.
village
'Maria is counting the things in the village.'
(10)' * M aría pe ya pe wá wi bàme e tue

```

Human goals, the recipients of gifts or the goals of sent items, are coded in the same position as an inanimate goal, preceding any auxiliaries. Their syntactic behaviour, however, is different (5.4.4). This is not to say that a human (or other animate entity) cannot be the goal of a motion predicate: is is also possible, but it is not possible for the postverbal, non-location participant of a predicate like ké leng 'give' to be classified as showing the same grammatical status as the goal of verbs of going: the former is an object, while the latter is an oblique.
```

Pe=te ke.
3SG.F=3SG.F.go 3SG.NF
'She went to him.'

```

Although positionally a recipient shows the same behaviour as a locational goal, recipients can be shown to have distinct morphosyntactic patterns that indicate that they are in fact best thought of as being exceptionally marked core arguments, and do in fact bear the grammatical function object.

\subsection*{11.3 Location}

Locations in which events take place are the most simply encoded of all adjunct NPs. There is no alternation in coding strategies: the location invariably appears clause finally, followed only by clause-level operators such as conjunction or switch reference, but following all other clausal elements including auxiliaries. There is no morphological material associated with the marking of a locative semantic role, either on the NP or on the verb. There is no difference in morphosyntactic realisation between an inner locative and an outer locative.
\begin{tabular}{ll} 
Pe=r-oe & pá-loe. \\
3SG.NF=3SG.NF-place.PL & house-platform
\end{tabular}
'She put them on the platform.'
(13) Ne ìngno-tong ne=wá-wá lí(hi) náti=ing a.

1PL banana-shoots 1PL=plant-RED garden new=the
'We plant the banana shoots in the new garden.'
(14) Nì ùepong nì=li TeLóngpa=we=ing.

1SG marriage \(1 \mathrm{SG}=\) do Enggros=this=DEIC
'I married in Enggros.'
In the following example a location appears in a clause with an auxiliary, and we can see that the location appears following this as well as the verb: it is truly clause-final.
\(\mathrm{Pe}=\) mong \(\quad\) e tue
3SG.F=F.sit
3SG.F.be 3
'She is sitting on the chair.'

The appearance of an NP in this final position, following auxiliaries, contrasts with the coding position of goals, detailed in the following section.

\subsection*{11.4 Goal}

The goal of a predicate is defined here as the location towards which an action directed in space, and is distinct from the recipient of an event of giving (see 11.4). A goal may be marked in a clause either by the bare NP appearing in postverbal position (the oblique slot), between the main verb(s) and any aspectual auxiliaries, or as a postverbal object, which appears in the same position but which is further indexed on the verb with the applicative suffix, and which is eligible for participation in those processes that specify an object as eligible where an oblique argument is not. Not all goals show this alternation in coding choices; the alternation is restricted to inanimate location goals ('destinations'), and does not apply to human recipients (this is part of the semantic specification of the applicative in Skou). This is just on factor in the differentiation of recipients from more prototypical goals, and concerns the grammatical function status of recipients as objects, not obliques or adjuncts.

Sentences (16) - (18) show that a manner-of-motion verb such as hú 'paddle' can appear simply with one argument, the paddler, and may also appear with a postverbal (and postauxiliary) location adjunct. This verb, and most like it, cannot appear with a goal argument.
(16) Ná nì=hú i li. paddle \(1 \mathrm{SG}=\) paddle be do 'I am paddling.'
(17) Ná nì=hú i li Pa ílóng. paddle 1SG=paddle be do Tami river 'I am paddling in the Tami river.'
\begin{tabular}{llll} 
Ná & nì=hú & Pa ílóng i li. \\
paddle & 1SG=paddle & Tami river be do \\
* 'I am paddling in the Tami river.'
\end{tabular}

In (19) and (20) we can see variations on one option for marking a goal in a sentence with a manner-of-motion verb predicate, using the applicative. In (20) the goal appears simply following the verb, but preceding any auxiliaries. Notice that (20) has an identical structure to (18); in fact, (18) is grammatical with the reading 'I am paddling to the Tami river.', but not with the reading given, which specifies a locative adjunct. (21) shows another option, with the verb re 'go' serialised in the clause following the goal.
\begin{tabular}{ll} 
Ná \(\quad\) nì=hú=na & Te Bpúbi. \\
paddle 1 1SG=paddle=APPL & Skou Sai \\
'I paddled to Skou Sai.'
\end{tabular}
\begin{tabular}{llll} 
Ná & nì=hú=na & Te Bapúbi i & li. \\
paddle & SGG=paddle=APPL & Skou Sai & be do
\end{tabular} 'I am paddling to Skou Sai.'
\begin{tabular}{lll} 
Ná & nì=hú=na & Pa ílóng re. \\
paddle & 1 SG=paddle=APPL & Tami river go
\end{tabular}
'I am paddling to the Tami river.'

Without an applicative a goal may still be included in the sentence, but only in a second clause; without the applicative, a goal may not appear simply with re 'go' in the same clause, as in (23).
location
Nì=ha tà báng.
\(1 \mathrm{SG}=\) walk running beach
'I'm running around on the beach.'
goal in clause with a motion verb
Nì=ha tà=ko nì=re te Tángpe.
\(1 \mathrm{SG}=\) walk running \(=\mathrm{OBV} \quad 1 \mathrm{SG}=\mathrm{go} \quad\) Skou Yambe
'I ran to Skou Yambe.'
goal ungrammatical in a clause with a manner-of-motion verb
\begin{tabular}{lll} 
* nì=ha tà & te Tángpe & re. \\
1SG=walk running & Skou Yambe & go \\
'I ran to Skou Yambe.'
\end{tabular}

A combination of goal and location is treated as a location for the purposes of position in the clause. In the following sentence hángpeng was consistently judged by speakers to be the goal of the sentence, even though it is also the location of the second predicate, and is marked as such (following the auxiliary 'do') in the sentence. \({ }^{55}\)

> Ke=ti í li hángpeng.
> 3SG.NF=3SG.NF.go sleep do jungle
> 'He's gone to sleep in the jungle.'
\[
\begin{array}{ll}
\text { * ke=ti } & \text { hángpeng í li. }  \tag{26}\\
\text { 3SG.NF=3SG.NF.go jungle sleep do } \\
\text { 'He's gone to sleep in the jungle.' } \\
\text { * 'He's gone to the jungle to sleep.' }
\end{array}
\]

It should be noted that these monoclausal purposive constructions are not common; the kinds of clauses seen in (27), with separate clauses separated by a switch-reference marker, are more frequent. A no-less grammatical, but more favoured way to code the event described in (25) is shown in (27). Here the status of hángpeng is unambiguously that of a location.
```

Ke=ti=ko
ke=í li hángpeng.
3SG.NF=3SG.NF.go=OBV 3SG.NF=sleep do jungle
'He's gone to sleep in the jungle.'

```

While infrequent, the fact that clauses such as (25) are grammatical means that we can construe a hierarchy of some sort in which goals outrank locations in terms of being realised in a clause.

\footnotetext{
55 Speakers would translate such sentences into Papuan Malay as De pi (ka) hutan tidor 3SG go (ALLATIVE) forest sleep.
56 The purposive interpretation would require agreement for subject on the second clause: \(\mathrm{Ke}=\mathrm{ti}\) hángpeng ke=í li 3 SG.NF=3SG.NF.go jungle 3 SG.NF=sleep do 'He's gone to the jungle to sleep.'
}

\subsection*{11.4.1 The cooccurence of location and goal in the one clause}

The one instance that been recorded of a sentence containing two postverbal NPs is when there is both an animate beneficiary serving as a goal, and a general location present as an outer oblique, in the same clause. The example given is the following:
\begin{tabular}{llll} 
Ha & pe=wé & n-ung & ke \\
bag & 3SG.F=get.F & 3SG.F-give & nè \\
'Where did she give the bag to him?'
\end{tabular}

While this was judged grammatical by speakers - indeed, it was offered as a first suggestion by a group as an example of the use of léng 'give', not in the context of eliciting for two postverbal NPs - it is not the only way that this meaning might be encoded. Indeed, it is not the preferred, or most common, way to code this set of meanings. Alternative, and more frequent, coding options include:
- marking two separate clauses, with the goal in one clause and the location in another, as in (27);
- forcing an aspect that will allow for an auxiliary to appear between the goal and the location, as in (29);
The following sentence shows quite explicitly the placement of the auxiliary between the goal and the location.
\begin{tabular}{lllll} 
Ha pe=wé & n-ung-nung & nì & tue \\
bag \(\quad\) 3SG.F=get.F & 3SG.F-give-RED & 1SG & 3SG.NF.do \\
pá-pè=pe=fue a. & \\
house-3SG.F. GEN=3SG.F.DAT=that \\
'She wants to give the bag to me at that house of hers.'
\end{tabular}

When we are dealing with 'true' spatial goals, as well as locations, we find that they cannot both appear in the same clause:
\begin{tabular}{ll} 
Ke=k-a tà-tà & ti \\
3SG.NF=3SG.NF-walk running-RED & 3SG.NF.go \\
'He wants to run to Skou Sai.'
\end{tabular}
Te Bapúbi li. Skou Sai do
GOAL LOCATION
(31)
\[
\begin{aligned}
& \text { * ke=k-a tà-tà ti } \\
& \text { 3SG.NF=3SG.NF-walk running-RED 3SG.NF.go } \\
& \text { 'He wants to run to Skou Sai on the beach.' }
\end{aligned}
\]
Te Bapúbi li báng. Skou Sai do beach

This shows that, despite having different phrase structural positions, there is some functional unity to adjuncts with these two different semantic roles in the clause.

\subsection*{11.5 Beneficiary}

Beneficiary is a semantic role that may be expressed in Skou uniquely; it does not, as is common in many languages, collapse with recipient as a single 'dative' category. There are, however, several different ways of expressing a beneficiary, depending in part on the valency of the verb, and in part on pragmatic factors, and so we cannot necessarily talk about one single (unified) 'beneficiary construction'. The common strategies can be classified based on the
position of the beneficiary in the clause, and the morphology and syntax that are used to encode it. The three strategies are:
- Preverbal: beneficiary is coded as the possessor of the object of the verb. This strategy is obviously restricted to bivalent clauses;
- Postverbal:
- beneficiary is marked with genitive or dative morphemes agreeing with the beneficiary
- beneficiary is marked with the deictic a;
- beneficiary appears as a simple NP (optionally marked with genitive and dative morphemes) following the main verb and separated from it by the obviative marker \(=k 0\).
These different strategies represent a wide variety of different formal means to represent the same function in morphosyntax. We can see that one coding strategy is biclausal, while another codes the beneficiary through morphological modification of the theme NP. Examples of these different strategies appear below. I have included explanatory phrase structure trees to emphasise the differences between the different strategies.

Preverbal possessor strategy: possessive pronominal beneficiary
Tenake pa-nì=ne te=ti-ti.
3DU.NF house-1SG.GEN=1SG.DAT 3PL=3PL.do-RED
'They will build a house for me.'
(32)'


nominal beneficiary
\(\begin{array}{lll}\text { Ánì-nì=ne } & \text { ál } & \text { nalélang-ké } \\ \text { mother-1SG.GEN=1SG.DAT } & \text { father } & \text { taro mashed.tuber-3SG.NF.GEN }\end{array}\) pe=tue. 3SG.F=3SG.F.do
'Mother is making taro lang for dad.'
(33)'


father taro mashed.tuber-3SG.NF.GEN
(34) Móe=ing nì=ké ke=ke.
fish=the \(\quad 1 \mathrm{SG}=\mathrm{get} \quad 3 \mathrm{SG} . \mathrm{NF}=3 \mathrm{SG} . \mathrm{NF} . \mathrm{DAT}\)
'I fetched the fish for him.'
(34)'

(35)
\begin{tabular}{lll} 
Á & nì=hù & i \\
bucket & 1 lig=1SG.sew & be do
\end{tabular}
nominal beneficiary
ánì-nì=ne-pè=pe.
mother-1SG.GEN=1SG.DAT-3SG.F.GEN=3SG.F.DAT
'I am sewing a bucket for my mother.'
(35)'

(The pronominal status of the verbal clitic \(n \mathbf{i}=\) means that no nominal subject is required)

Postverbal, deictic oblique strategy: pronominal beneficiary
(36) Ha pe=tue ke=ing a.
bag 3SG.F=3SG.F.do 3SG.NF=the
'She made a bag for him.'
(36)'


Postclausal strategy: nominal beneficiary
(37)

Nì=hà=ko anì.
\(1 \mathrm{SG}=\) weave \(=\mathrm{OBV}\) mother
'I am weaving (something) for mum.'
(38)
Nì=hà=ko anì-nì=ne-pè=pe.
\(1 \mathrm{SG}=\) weave \(=\mathrm{OBV}\) mother-1SG.GEN=1SG.DAT-3SG.F.GEN=3SG.F.DAT
'I am weaving (something) for mum.'
(38)'


The NP following the obviative marker is still part of the same clause as the material preceding it, as can be shown by examining the behaviour of clauses of this type when an auxiliary is used. The auxiliary appears following the beneficiary, and not preceding it.
\begin{tabular}{llll}
\begin{tabular}{ll} 
Bòeng=ing & \(p e=t u e=k o\)
\end{tabular} & bá-tè=te & tue? \\
basket=DEIC & 3SG.F=3SG.F.do=OBV & who-3PL.GEN=3PL.DAT & 3SG.F.do \\
'Who is she weaving the baskets for?' & & \\
* bòeng ing pe tue tue ko bá tè te? & &
\end{tabular}

When the beneficiary is questioned it may appear in a preverbal position, but then the use of possessive pronominal strategy is obligatory:
\begin{tabular}{llll} 
Á-bá-ke \(\quad\) mè=m-ù & me & pi? \\
bucket-who-3SG.NF.DAT 2SG=2SG-sew \\
'Who are you sewing (that) bucket for?'
\end{tabular}
\begin{tabular}{llll} 
Á-bá & mè=m-ù & me & pi? \\
bucket-who & 2SG=2SG-sew & 2SG.be & 2SG.do
\end{tabular}

It is grammatical, but unusual, for a questioned beneficiary to appear postverbally. Most speakers questioned on this felt that it is more acceptable, though still somewhat unusual, if the beneficiary is a question word, as in (32)a.
\[
\begin{array}{llll}
\text { a. \# A mè } \quad \text { m-ù } & \text { bá-ké } & \text { me } & \text { pi? }  \tag{42}\\
\text { bucket 2SG=2SG-sew } & \text { who-3SG.NF.GEN } & \text { 2SG.be } & \text { 2SG.do } \\
\text { 'Who are you sewing (that) bucket for?' }
\end{array}
\]

Note that this is the only case in which a question word is found by preference in a position other than its normal one, that is, the only instance in which there is evidence for there being a special focus position.

It is equally ungrammatical for a non-possessive strategy to be used preverbally, or postverbally, in questions, as can be seen by the ungrammatical \(b\). versions of the following sentences.
\[
\begin{array}{llll}
\text { b. * A bá mè }=m \text { - } \quad \text { me } & \text { me } & \text { pi? } \\
\text { bucket who } & \text { 2SG=2SG-sew } & \text { 2SG.be } & \text { 2SG.do } \\
\text { 'Who are you sewing (that) bucket for?' } &
\end{array}
\]

The possessor of NP strategy may be employed even when the identity of the possessor is questioned, as can be seen in the following sentence, in which the possessive marking is replaced by the interrogative clitic bá. There is no dative form of the interrogative, so, in the absence of information about the sex of the recipient, the generic (and thus unmarked for gender - see 6.3) 3SG.NF dative clitic \(=k e\) is used.
(43)
\begin{tabular}{lll} 
Ánì, & mè & nalélang-bá=ke \\
mother & 2SG & taro mashed.tuber-who=3SG.NF.DAT \\
mè=pi & me \(\quad\) pi? \\
2SG=2SG.do & 2SG.be 2SG.do \\
'Mother, who are you making pounded taro for?'
\end{tabular}

If the recipient in the sentence above was known to be a woman, but the identity of the particular woman in a group of others was being questioned, then the form nalé lang bá pe would be perfectly acceptable. Even in these sorts of situations, however, it is possible to use the 'non-feminine' dative suffix, showing that the 'non-feminine' category really is simply characterised by being unmarked for gender, and not for having a particular marking that excludes feminine-gendered participants. See chapters 6 and particularly 10 for more discussion.

\subsection*{11.6 Source}

The usual means of encoding a source is with a serial verb construction involving há 'from', which, while being an independent and separate verb root, is clearly etymologically related to either the verb ha 'walk' or há 'stand, get up'. The fact that the tone of 'walk' is different is evidence that it is not synchronically the same etymon as há 'from'. Há 'stand' would appear to be a likely candidate, but in fact the inflectional paradigms of the two verbs are distinct, as can be seen in (44).
\begin{tabular}{lllll} 
& há 'from' & há ‘stand up' \\
& SG & PL & SG & PL \\
1 & há & ná & há & ná \\
2 & má & há & má & há \\
3NF & ká & yá & ká & tá \\
3F & wá & & wá &
\end{tabular}

On the basis of the distinct conjugation in the 3PL cell of the paradigm, we must conclude that these verbs, too, are distinct synchronically, no matter how compelling the circumstantial evidence is to consider them to have a common source, historically. (The paradigm for 'walk' has ya in the 3PL, suggesting that, if the inflectional evidence is historically stable [for which there is ample counter-evidence] 'walk' might be though of as being more closely related to 'from' than is 'stand'.) In addition to the source-specifying verb there must also be a verb indicating endpoint, typically one of loe 'come', re 'go', moe 'return'; less commonly this is combined with a direction verb, such as e 'go east' or hóe 'come landward, south'. It might be that the source specified by the use of há already fills the morphosyntactic template for direction (albeit the reverse of what is normal), making the specification of further directionalinformation something of an overload.
Mè=m-á \(\quad\) nè \(\quad\) p-oe?
2SG=2SG-from where 2 2SG-come
'Where have you come from?'
(9999) Nì=há TeÓeti re.
\(1 \mathrm{SG}=\) from Wutung go
'I went from Wutung.'

Nì=há pá re-re li.
\(1 \mathrm{SG}=\) from house go-RED do
'I went (there) straight from the house.'
An alternative coding for source involves specifying the location at which the subject was prior to movement, with a verb of location, and following this with a verb of coming or returning, which of course may also be serialised with other motion specifying verbs (see 5.4.1.3,5.4.1.4). The following two sentences are functionally identical.

Nì=há loko loe.
\(1 \mathrm{SG}=\) from east come
'I came from the east.'
\(\mathrm{Pe}=\) moeng Nofé toe.
3SG.F=sit Jayapura 3.come
'She came from Jayapura.'
(49)'

Pe=w-á Nofé (pe=)w-a toe.
3SG.F=3SG.F-from Jayapura 3SG.F=3SG.F-walk 3.come
'She walked here from Jayapura.'
Note that this is not a multi-clausal construction; if it were, we sould expect to see the possibility of some indication of switch reference, as in (99) and (99).
* pe=w-á=pa Nofé toe

3SG.F=3SG.F-from=INSTR Jayapura 3.come
'She came from Jayapura.'
* pe=w-á Nofé=pa toe

3SG.F=3SG.F-from Jayapura=INSTR 3.come
'She came from Jayapura.'
* pe=w-á=ko Nofé toe
3SG.F=3SG.F-from=OBV Jayapura 3.come
'She came from Jayapura.'
* pe=w-á \begin{tabular}{l} 
Nofé=ko toe \\
3SG. \(=\) 3SG.F-from Jayapura=OBV \\
'She came from Jayapura.'
\end{tabular} 3.come

The source marking is in a sense the opposite function of the postverbal marking for beneficiaries, as seen in 11.4. It occupies the same position in the clause as does a beneficiary or goal (or any obliques other than locations), as shown in the (pragmatically odd) clause in (999), which shows 'come from' with an auxiliary construction.
(999)
\(\begin{array}{lllll}\text { Pè=p-á } & \text { fue a } & \text { e } & \text { tue } & \text { toe } \\ \text { 3SG.F=3SG.F-from } & \text { there } & \text { 3SG.F.be } & \text { 3SG.F.do } & \text { 3.come }\end{array}\)
'She is coming from there.'
xxxxx

\subsection*{11.7 Oblique agents}

Agents can be encoded as oblique 'sources' in some languages, where they appear as the agents of passive constructions. In Skou there is a passive that allows for an overt agent (see 13.3), but it does not appear with the morphosyntactic coding for sources. While there is no evidence
to suggest that it is coded as a source, we can state that it is treated as a postverbal oblique (see 11.2-11.4), either goal or location. The passive construction does not occur with the aspects marked by the auxiliaries ili 'be'+ 'do', and so the exact postion cannot be determined. The inability of a passive agent to appear in the same clause as a location might suggest a locative coding for the agent, but the fact that goals and locatives are also constrained against appearing in the same clause means that this is not conclusive.
```

Mòng ke=wí pe.
affect 3SG.NF=get 3SG.F
'He was hit by her.'
* mòng ke=wí pe pá
affect 3SG.NF=get 3SG.F house
'He was hit by her in the house.'

```
    Ke=k-a tà-tà ti Te Bapúbi li.
    3SG.NF=3SG.NF-walk running-RED 3SG.NF.go Skou Sai do
    'He wants to run to Skou Sai.'
    * ke=k-a tà-tà ti Te Bapúbi li báng.
    3SG.NF=3SG.NF-walk running-RED 3SG.NF.go Skou Sai do beach
    'He wants to run to Skou Sai along the beach.'

Because the test for cooccurence restrictions only tells us that the agent is a postverbal oblique or not, and because the passive construction does not appear with aspects that call for the use of the auxiliaries, the exact position of the postverbal coding of the agent cannot be determined. We can only state with confidence that the agent is coded as either a goal or a locative, but not decide which.

\subsection*{11.8 Instruments}

Instruments may appear anywhere in the clause preceding the verb, so long as they do not interrupt a verb and its adjunct nominal (see chapter 14). If they precede a nominal subject, then they must be interpreted as topicalised. In addition to this preverbal positional restriction, they must retain the instrumental marker =pa, whether they precede or follow any object present in the clause. Examples of instruments both preceding and following the object are shown in (56) and (57), while (58) and (59) give examples of monovalent sentences with a marked instrument, with the functions means of transport in (58) - (60), and platform for action in (61).
(56) Hòe-toe rangwáue=pa nì=lé.
sago-tree axe \(=\) INSTR 1 SG=chop
'I chop the sago tree with (my) axe.'
fe=pa hòe ne=n-ang.
chopsticks=INSTR sago 1PL=1PL-eat
'.. and we eat the sago with chopsticks.'
Pe tangtitíí=pa pe=te.
3SG.F car=INSTR 3SG.F=3SG.F.go
'She went in a car.'
(59) Fu wa ro=ing ne tang=pa ne=ne-ne ka. west.wind.season=the 1PL canoe=INSTR 1PL=1PL.go-RED NEG 'We won't go by canoe when the western winds are blowing.'
(60) Nì tang-nì=ne=pa nì=hítáfí hang.

1SG canoe-1SG.GEN=1SG.DAT=INSTR 1 SG=collide coconut 'I crashed into a coconut tree on my bike.'
(61) F éng langro te=balèng tang \(=\mathrm{pa}\) móe te=r-í
wind eat.wind 3 PL=male canoe=INSTR fish 3PL=3PL-get.PL
'In the season with eastern winds the men catch fish in canoes.'
Additionally, for some speakers instruments may appear following the verb, in the position in which goals and beneficiaries appear. There does not appear to be an easily definable distribution of the speakers who allow postverbal instruments and those who do not, based on geographical or clan lines, though there is a tendency for older speakers to be more likely to accept the postverbal position for instruments. For these speakers, then (58)' is as acceptable as (58).
(58)' Pe pe=te tangtítí \(=\mathrm{pa}\).

3SG.F 3SG.F=3SG.F.go car=INSTR
'She went in a car.'
These possibilities may be schematised as follows, with arrows showing where an instrumental phrase may be inserted, and asterisks marking ungrammatical positions.

Possibilities for instrumental NPs: templatic view

Although an instrument may appear before a nominal subject it seems that this is only possible if the instrument is a topic, as seen in the following examples.
\[
\begin{align*}
& \mathrm{Pe} \text { tangtítíl pa pe=te. }  \tag{63}\\
& \text { 3SG.F car=INSTR , 3SG.F=3SG.F.go } \\
& \text { 'She went in a car.' } \\
& \text { (64) Tangtítíl=pa, pe pe=te. } \\
& \text { car=INSTR 3SG.F 3SG.F=3SG.F.go } \\
& \text { 'In a car, she went.' }
\end{align*}
\]

Note that a pre-subject instrument may not be questioned, confirming the incompatibility of the pre-sentential pragmatically marked ('topic') position with the focus function that is inherent with content questioning.
\[
\begin{align*}
& \text { Pe ya=pa pe=te? }  \tag{65}\\
& \text { 3SG.F what=INSTR } \quad \text { 3SG.F=3SG.F.go } \\
& \text { 'What did she go in?' } \\
& \text { (= 'By what means did she travel?') }
\end{align*}
\]
\[
\begin{array}{lll}
* \text { * ya=pa, } & \text { pe } & \text { pe=te? }  \tag{66}\\
\text { what=INSTR } & \text { 3SG.F } & \text { 3SG.F=3SG.F.go }
\end{array}
\]

Because of the presence of a pre-subject instrument being ascribable only to productive topicalisation that may apply to any nominal in the clause, and so not part of a distributional rule
specifically describing the instrumental, we may reduce the statement of appearance of instruments in the clause to the following. This tree shows that an instrument can be leftadjoined to either a VP or a \(V^{\prime}\). Despite there being two positions available for the instrument to appear in, no clause may contain two different instrumental NPs, or iterations of the same instrument.

Basic positions for instruments in the Skou clause: preverbal


Note that the alternative representations seen in (62) and (67) are not compatible. Specifically, some of the positional variants in (62) are not predicted from (67). To resolve this, we need to make the following assumptions. First, the pre-subject position is the result of the automatic positioning of an NP preceding the other elements of the clause when it is topicalised, as described above. Secondly, the postverbal occurrences of instrumentals, not acceptable to all speakers, are the result of the isntrumental appearing in the general oblique position, which follows the auxiliary. Examples of the variation possible in the positioning of instruments can be seen in the next three sentences:

Ke rangwaue=pa rító ke=le.
3SG.NF axe=INSTR tree 3SG.NF=chop
'He chopped the tree down with an axe.'
(68)' Ke rító rangwaue pa ke le.
'He chopped the tree down with an axe.'
(68)" Ke rító ke le rangwaue pa.
'He chopped the tree down with an axe.'
The same sentence, but with a sentence-initial topicalised instrument, is shown in (69).
Rangwaue pa, ke rító ke le.
'With an axe, he chopped the tree down.'
This last construction is somewhat rare, as an instrument that receives sufficient pragmatic prominence is more likely to be coded in an alternative structure using a serial verb construction, and described below. This involves the instrument appearing as the object of the verb ké 'get, (use)'. In this case we find the main verb and its object appear after ké. There is no instrumental case marker on the instrument of the combined clause, since it is the object of its own verb.

While this might be seen to be a spurious comment, self-evident and unnecessary, many languages of the New Guinea region do have structures in which the instrumental NP is case marked as instrumental, but also appears as the object of a verb meaning 'get, use' as part of a serial verb construction. It appears that these nominals are subcategorised for by the 'get' verb, but receive case marking as a result of their function in the clause as a whole (providing strong support for the analysis that serial verb constructions are monoclausal). This may be modelled as follows:
(70) [ NP SUBJ \(\left[\mathrm{NP}_{\text {INSTR-case(INSTR) }} \quad\right.\) 'get' ] NP \({ }_{\text {OBJ }}\) Verb ]

Structures of this sort are found in Korafe (Farr 1999: xxx) and other languages in New Guinea. In Meyah (Gravelle 2001) instruments appear marked not only with an instrumental case, but also with an applicative morpheme on the verb. Since these structures are not found in Skou, they are not discussed in detail here, but they indicate the 'confused' status of instrumental case marking in many of the languages of New Guinea.

An example of the instrumental serial verb construction in Skou is shown below.
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[t]{3}{*}{(71)} & Ke & [ rangwaue & ke=ké ] & rító & \(\mathrm{ke}=\mathrm{le}\). \\
\hline & 3SG.NF & axe & 3SG.NF=get & tree & 3SG.NF=chop \\
\hline & \multicolumn{5}{|l|}{'He used an axe to chop the tree.'} \\
\hline \multicolumn{6}{|l|}{(72) * ke rangwaue pa ke ké rító ke le} \\
\hline
\end{tabular}

Note that it is still possible for the sentence to be coded without a serial verb construction, as seen in (73). The option of coding with a serial verb construction is preferred for answers to content questions concerning instruments, as this construction puts the focus on the instrument more clearly than in a clause with the instrumental case (reflecting universalist principles that assign higher pragmatic salience to higher grammatical functions). The following sentences are ranked from most to least likely to be spontaneously prodiced by native speakers.
\[
\begin{array}{lll}
\text { a. } \begin{array}{ll}
\text { Tangnófó } & \text { ke=ké=ko } \\
\text { knife } & \text { ke=Húng-tè } \\
\text { 3SG.NF=get=OBV } & \text { 3SG.NF=Sentani-3PL.GEN }
\end{array} & \text { ke=kí. }  \tag{73}\\
\text { 'He stabbed the Sentani with a knife.' } &
\end{array}
\]
\[
\begin{array}{cll}
\text { b. \# Ya=pa } & \text { ke=H úng-tè } & \text { ke=kí? } \\
\text { what=INSTR } & \text { 3SG.NF=Sentani-3PL.GEN } & \text { 3SG.NF=stab }
\end{array}
\]
'What did he stab the Sentani man with?'
\[
\begin{array}{lll}
\text { c. * ke } \quad \text { ya=pa } & \text { ke=H úng-tè } & \text { ke=kí } \\
\text { 3SG..nF what=INSTR } & \text { 3SG.NF=Sentani-3PL.GEN } & \text { 3SG.NF=stab } \\
\text { 'What did he stab the Sentani man with?' } &
\end{array}
\]

The answer to such a question, regardless of the phrasing of the instrument as a serial verb object or an overtly-marked oblique, is perfectly acceptable with a non-initial oblique instrument. Alternatively the serial verb construction may be used, but this is only likely if the question involved the serial verb construction, and there is an element of contrastive focus concerning the expected and the actual identity of the instrument. The a. sentence below is only likely to be heard answering the question in (73)a, while the b. sentence can answer either of (73)a or (73)b.
\(\begin{array}{lllll}\text { a. Ke } & \text { tangnófó } & \text { ke=ké=ko } & \text { (ke) } & \text { ke=kí. } \\ \text { 3SG.NF } & \text { knife } & \text { 3SG... } & \\ \text { CHe }=\text { get=OBV } & \text { 3SG.NF } & \text { 3SG.NF=stab }\end{array}\)
'He stabbed him with a knife.'
b. Ke tangnófó=pa (ke) ke=kí.
3SG.NF knife=INSTR 3SG.NF 3SG.NF=stab
'He stabbed him with a knife.'

Some speakers allow an instrument to appear postverbally, in addition to the positions already described. In this case it is still marked by =pa; an example can be seen in the following sentence.
(75)
\begin{tabular}{llll} 
Ke & rító & ke=le & rangwaue=pa. \\
3SG.NF & tree & 3SG.NF=fell & axe=INSTR
\end{tabular}
'He cut down a tree with an axe.'
Now, as mentioned above, this type of construction is not possible for all speakers, and even some of the speakers who accept postverbal instruments reject them at other times. Universally, though, the instruments must appear with over marking of their status by the postposition/clitic=pa, unless there is a serial verb introducting the clausal instrument as its object.

\subsection*{11.8.1 Instrumental alternatives}

Of all the nominals in a clause that are not subcategorised for by the main verb, instruments are the ones most likely to appear in a serial verb construction, using the verb ké 'get' to introduce the instrument as its object. This strategy exists in addition to the more frequent case-marking strategy described above, though in this they are again unique, since no other oblique nominals are found with a dedicate case marker to indicate their function.

The fact that there is a way to code instruments as the objects of a serial verb construction, which shows that they are more salient than when they appear with the instrumental marker, does not preclude them from appearing with the instrumental marker and a pragmatic focus, as can be seen in the following.
\[
\begin{array}{lll}
\text { Ya=pa } & \text { ke=H úngteng } & \text { ke=kí? }  \tag{76}\\
\text { what=INSTR } & \text { 3SG.NF=Sentani } & \text { 3SG.NF=stab } \\
\text { 'What did he stab the Sentani with?' }
\end{array}
\]

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Non-pronominal inflection with the instrumental case marker also found in the D position. This means that case-marked instruments cannot appear with deictic modification. If an instrument must be marked with a deictic, it is coded with a serial verb construction. See 11.xxx for examples.

\subsection*{11.9 Applicatives}

There is an applicative morpheme which may occur with monovalent verbs, and which is used to indicate a goal argument serves as the object of the clause. The applicative morpheme -na is suffixed to the verb, and the source applicative appears prefixal to the verb. A simple example is shown below:
\[
\begin{align*}
& \text { Nì=ha tà-na báng. }  \tag{99}\\
& \text { 1SG=walk running-APPL beach } \\
& \text { 'I'm running to the beach.' }
\end{align*}
\]

The applicative is quite restricted, being found only with monovalent verbs of motion. The applicative construction and the syntax associated with it is described in more depth in 13.2.

\subsection*{11.10 Correlations of morphosyntax and semantics}

The following table lists the different morphosyntactic devices that are attested in Skou, namely position, case and various verbal devices, along with the different sorts of structural and semantic roles that they can be used to encode.

There is clearly a strong skewing against the encoding of material on the verb, other than the agreement patterns described in Chapter 7. Case marking occupies a middle position, both in terms of the degree to which it is used, and also the arguments that it is used to encode. With the sole exception of the optional ergative use of summation pronouns, case marking choices are restricted to middle-level semantic roles, beneficiaries, recipients and instruments. Positional encoding is by far the most frequently used device for showing argument status in Skou, and also the one that shows the sharpest core versus oblique distinction. Clearly the distinction betwen subjects and objects, on the one hand, and obliques and adjuncts on the other, is the most heavily grammaticalised one in Skou, as it is in most (if not all) non-Austronesian languages of New Guinea.

Table 154. Morphosyntactic coding and semantic roles
\begin{tabular}{|c|c|c|c|c|c|}
\hline & V & V & case & APPL & SVC \\
\hline SUBJ, OBJ & \(\checkmark\) & & \((\sqrt{ })\) & & \\
\hline Beneficiary & \(\checkmark\) & & \(\checkmark\) & & \\
\hline Beneficiary & & \(\checkmark\) & \(\checkmark\) & & \\
\hline Instrument & \(\checkmark\) & \((\sqrt{ })\) & \(\checkmark\) & & \((\sqrt{ })\) \\
\hline Location & & \(\checkmark\) & & & \\
\hline Goal & & \(\checkmark\) & & \((\sqrt{ }\) ) & \\
\hline Source & & \(\checkmark\) & & & (V) \\
\hline
\end{tabular}

This table can be compared to table 80 xx in 3.13 , in which similar material is presented from a different perspective and with slightly different values on the axes.

\subsection*{11.11 Summary: oblique nominals from a formal perspective}

This chapter has been functionalist in its organisation: the different oblique functions have been presented according to the semantic function that they represent. It is also useful to examine these nominals formally, that is, in terms of the question 'What functions can a certain form encode?' This is the aim of this final section.

\section*{12 Serial verb constructions}

Serial verb constructions are a hallmark of languages of the New Guinea area. These constructions are not, however, as frequent in Skou as a survey of other languages in the area would lead one to suspect. It is because of the existence of positional licensing operative in Skou that we see many non-subcategorised for arguments appearing in the clause without the use of serial verb constructions:
- strict word order makes the appearance of locatives unambiguous when they follow the verb;
- an overt instrumental marker makes instrumental phrases easily identifiable, even though they are not strictly positionally coded.
The main areas where we find verb serialisation in Skou are in the linguistic encodings of the following kinds of events:
- motion verbs, further specifying the direction of movement:
- verbs showing direction: eastwards, westwards, seawards, landwards (= returning);
- manner of motion verbs, further specifying the orientation of the movement:
- running, walking, paddling, chasing, etc.;
- transfer events:
- verbs of getting, combined with verbs of giving or bargaining;
- aspect marking by:
- the verb i 'be' to mark habitual action;
- the verbli 'do' to mark intention;
- the verbs i 'be' and li 'do' used together to mark progressive action;
- the verbs toe '(third person) come' and te '(she) goes' to mark kinds of completion and inception;
- special predicate types:
- predicates with results;
- predicates of violence with inverted pragmatic focus;
- passives;
- purposelessness

These different factors that are associated with serial verb constructions are not mutually exclusive; it is quite possible, indeed common, to specify a manner of motion predicate for
orientation, direction, and as being continuous, as seen in the following example. There is only one verbal clitic present, implying that we are only dealing with one verb 'unit', moe wa tà po te; alternatively expressed, the serialisation present in Skou is always of the contiguous type, and non-contiguous serialisations are not found. The whole serial construction is, therefore, within the scope of the same agreement clitic. Any exceptions to this must necessarily involve switch reference marking. Other evidence supporting the view that there is in a sense only one 'verbal unit' involves the assignment of a pitch contour: there can only be one tone melody assigned to the whole serial verb construction (this is true for motion verb sequences such as that presented here, and for other serial verb constructions as well). In the examples they have been written as separate words for the sake of easy identification of the semantic units, and because, although there is no requirement that each verb should take its own proclitic, each verb that can must take prefixal agreement marking, and the glosses of these prefixes would become confusing if the serial verb was written as one unit, as seen in (1)'. Further discussion of the issues raised here can be found in 7.8; discussion of the phonological paameters behind tonal assignment can be found in 2.3.1.8.
\begin{tabular}{llllll} 
SUBJ & Centrifugal & Manner-of-motion & Direction & Motion & Goal \\
Pe & pe=moe & W-a tà & p-0 & te & báng \\
3SG.F & 3SG.F=return & 3SG.F-walk running & 3SG.F-seawards & 3SG.F.go & beach
\end{tabular}

Progressive aspect e tue.
3SG.F.be 3SG.F.do
'She's running back down to the beach.'
\begin{tabular}{llll} 
& SUBJ & Centrifugal:manner-of-motion:direction:motion & Goal \\
(1)' & Pe & pe=moe-w-a tà=p-o-te & báng. \\
& 3SG.F & 3SG.F=return-3SG.F-walk running-3SG.F-seawards-3SG.F.go & beach
\end{tabular}
(1)" Pe pe moe wa tà po te báng.
[ - - - 1 _ _ - ]
In this example we can see the basic predicate is the manner-of-motion indicated by the verb + nominal ha tà 'run'. This core is preceded by the verb moe 'return', and is followed by the directional verb 0 'seawards', the motion verb re 'go (from speaker)'. The goal follows, and the entire clause is concluded with the (double) use of the verbs of being, i and Ii. Any of the verbs in the sequence, apart from the auxiliary verbs, may take a clitic pronoun, though it is only required on the first verb in the sequence, and so for reasons of redundant information being kept to a minimum at phrasal levels and above, it is not normal to multiply express proclitics.

In this chapter, as well as elsewhere in this book, I shall refer to these constructions as serial verb constructions. This is, however, slightly inaccurate. While verbs overwhelmingly make up the components of these predicates, adjectives and also complex predicates involving adjunct nominal + verb constructions can also be found in a so-called 'serial verb construction', as the following example attests.
serial 'verb' construction with one simple verb, one complex predicate, and one adjective
(2)
\begin{tabular}{llcl} 
& VERB & [ADJ. NOM+VERB] & ADJ. \\
\begin{tabular}{llll} 
Bòeng=fue= ra=ing a & ke=jí(=ko) & báng & li
\end{tabular} & fèng. \\
small.basket=that=also=the & 3SG.NF=break=OBV & snap do do & bad \\
'He then even hit that basket so that it broke apart and was ruined.'
\end{tabular}

A more accurate term would be 'serial predicate construction', reflecting the makeup of the different elements that may participate in such a process. The term 'serial verb construction' shall be retained because it is clear that the constructions described here are comparable to those described using this term elsewhere.

Finally, we need to mention a semantic relation that is frequently found encoded in serial verb construction, but which in Skou most commonly appears in a switch reference construction. The encoding of cause-result predicates, such as in (2), is often found with an overt marker of biclausality, the switch-reference marker \(=k 0\). This is described in more detail in 19.5 .

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\subsection*{12.1 Clitic placement in serial verb constructions}

In the previous section we identified the fact that the requirement for proclitic agreement can be satisfied by a single clitic appearing on the leftmost verb in the sequence. It is possible, though less likely, for a series of clitics to appear. Any or none of the verbs in a serial verb construction may be marked with a clitic, as long as the first verb in the series is so marked. It is not possible for a serial verb construction to appear without proclitic agreement on the first verb in the series.

Some possible alternative versions of (1), differing only in terms of the placement of different numbers of optional agreement proclitics, are shown in (3).

Alternative clitic placements
(3) a. Pepe moe pe watà po te báng e tue.
b. Pepe moe watà pe po te báng e tue.
c. Pepe moe watà po pe te báng e tue.
d. Pepe moe pe watà po te báng e tue.
e. Pepe moe pe watà \(\boldsymbol{p e}\) po te báng e tue.
f. Pepe moe pe watà pe po pe te báng e tue.
...etc.
Note that auxiliary verbs found in serial verb constructions may not be marked by clitics, just as they are not eligible for clitic marking when there is only a single verb as the predicate of the clause.
g. * Pepe moe watà po te báng \(\boldsymbol{p} \boldsymbol{e}\) e tue.
h. * Pepe moe watà po te báng epe tue.
i. * Pepe moe watà po te báng pe e pe tue.

\footnotetext{
Pe hòe pe=p-ang e tue.
3SG.F sago 3SG.F=3SG.F-eat 3SG.F.be 3SG.F.do
'She is eating sago.'
}
(5)'
a. * pe hòe pe pang pe e tue
b. * pe hòe pe pang epe tue
c. * pe hòepe pang pe epe tue

Even if following verbs take clitics then placement of adverbs shows the whole sequence of verbs to behave as a single unit. The position of the location báng 'beach' in (3)' follows all the verbal elements except the auxiliaries, and cannot precede any of the non-auxiliaries.
(3)' a. * pe pe moe watà po te báng pe e tue,
b. * pe pe moe watà po te báng e pe tue

Manner adverbs, which usually precede the predicate that they modify, precede all of the verbs in the serial verb construction. The placement of additional clitics does not affect the possible positioning of adverbs: the remain at the beginning of the whole string of verbs.
a. Peláláfa pe moe watà po te báng e tue. slowly
b. * pe pe moe láláfa pe watà po te báng e tue.
c. * pe pe moe (pe) watà láláfa pe po te báng e tue.
d. * pe pe moe (pe) watà (pe) po láláfa pe te báng e pe tue ...etc.

With serial verb constructions that do not involve motion predicates, such as serial verb constructions from the other categories listed as the start of this chapter, the options for clitic placement are not found. Only one clitic, found at the left edge of the serial verb construction such as is seen in (5), is encountered.

\subsection*{12.2 Multiple prefixation in serial verb constructions}

The examples already presented have shown that each verb root in a serial verb construction must take prefixal agreement if it is eligible to do so (this applies to agreement by vowel alternation or stem suppletion as well). That is, if the verb would have inflected by prefix, vowel, or suppletion if it were the sole verbal element in a clause, then this same agreement must appear in the serial verb construction.

A concrete example of this is shown below. In The first clause each verb shows agreement as normal, and the clause is grammatical. If prefixal agreement is omitted on either of the verbs, the clause is judged ungrammatical, as in the sentences in (7).
Pe pe=w-a tà te pá.

3SG.F 3SG.F=3SG.F-walk running 3SG.F.go house
'She's running to the house.'
a. *pe
pe=w-a tà \(\begin{array}{ll}\text { re } & \text { pá } \\ \text { Ø.go } & \text { house }\end{array}\)
3SG.F 3SG.F=3SG.F-walk running
'She's running to the house.'
\(\begin{array}{lll}\text { b. } \begin{array}{ll}\text { *pe } & \text { pe=ha tà } \\ \text { 3SG.F } & \text { 3SG.F=Ø.walk running }\end{array} & 3 S\end{array}\)
te pá
3SG.F 3SG.F=Ø.walk running 3SG.F.go house
'She's running to the house.'
\[
\begin{array}{lll}
\text { c. *pe } & \text { pe=ha tà } & \text { re } \\
\text { 3SG.F } & \text { pá } \\
\text { 3SG.F=Ø. walk running } & \text { Ø.go } & \text { house } \\
\text { 'She's running to the house.' } & &
\end{array}
\]

This pattern, that of retaining lexical agreement alternations as well as theclausally-specified clitic agreement, creates a predicate with multiple locations for marking agreement, not disimilar to facts found for the verbal collocations discussed in 7.8. The principles by which we can distinguish these as separate phenomena are the productivity of combination that is found with serial verb constructions, and the fact that independent meanings can be ascribed to all elements of a serial verb construction, which is not always true for the different inflecting elements of the sorts of predicates that have been described in 7.8.

\subsection*{12.3 Agreement in serial verb constructions}

In chapter 7 we examined the facts of muliple exponence in the Skou verbal agreement system, both the realisation and status of the different agreement marking strategies on verbs in the language. In the case of a serial verb construction, we find that there remain some issues in agreement that have not yet been dealt with. We have alrready, in the previous section, discussed the fact that individual verbs will each show prefixation, but that is not the end of the story as far as agreement goes. The following sections each present one issue that is related to the idea of agreement in serial verb constructions.

\subsection*{12.3.1 The use of proclitics on both verbs}

While prefixation is consistently applied to all individual lexical verbs in a serial verb construction (or, of course, to lone verbs or to each member of a verbal collocation, if applicable - see 7.8), unexceptionally, proclitic agreement is not so consistent. In some cases we find proclitic agreement on both verbs, while there are other attestations of the same verbs serving apparently the same function, but with clitics only one the first verb in series. There are no textual or naturally-occurring attestations of serial verb constructions with three or more verbs in which each verb takes individual proclitic marking, though speakers usually accept these as grammatical when presented with them as an alternative. Furthermore, it appears that whenever there is an adjunct nominal + verb predicate in a serial verb construction, then the verb in this series must take proclitic agreement.

The following examples show both of the main possibilities, with the first sentence having proclitics on both verbs, and the second showing a single proclitic serving as the sole pronominal exponent in the clause.
(8) Ne líhi náti ne=ne ne=pang-pang.

1PL garden new 1PL=1PL.go 1PL=chop.PL-RED
'We went and cleared (it) away to make a new garden.'
\[
\begin{align*}
& \text { Ríto nawò ne=ne } \quad \text { [ ]=pang-pang. }  \tag{9}\\
& \text { tree many 1PL=1PL.go chop.PL-RED } \\
& \text { 'We went and chopped up all the trees.' }
\end{align*}
\]

The differences given in the translations for the two sentences are real reflections of the different structures in Skou: there is a strong sense of biclausality in the first sentence, while the
second sentence has a feeling of being a unified, single event. Tests such as negation bear this out; the scope of a sentence-final negator is ambigous in the case of a sentence with two proclitic agreement markers, but has only one, inclusive, interpretation if there is only one proclitic.
\begin{tabular}{lllll}
\(\mathrm{Ne} \quad\) líhi & náti & ne= ne & ne= pang-pang & ka. \\
1PL garden new & 1PL=1 PL.go & 1PL=chop. PL-RED & NEG \\
'We didn't go and clear (it) away to make a new garden.' & \\
'We went but didn't clear (it) away to make a new garden.' &
\end{tabular}
Ríto nawò ne=ne [ ]=pang-pang ka.
tree many 1PL=1PL.go chop.PL-RED NEG
'We didn't go and chop up all the trees.'
* 'We went but didn't chop up all the trees.'

The next example shows three predicates together, in which one proclitic appears at the start of the verbal series, and another appears on the light verb that concludes the serial verb series as part of the NV complex predicate lolo li 'exchange'.
\(\begin{array}{llllll}\text { (10) } & \text { Nì } & \text { táng } & \text { nì=á } & \text { re lolo } & \text { nì=li } \\ & \text { 1SG } & \text { bird } & \text { te=Húele. } \\ & \text { 1SG=carry } & \text { go exchange } & 1 \mathrm{SG}=\mathrm{do} & \text { 3PL=Sangke }\end{array}\)
'I exchanged a bird with the Sangkes (for something else).'
This example is however a false example of the optionality of proclitics, since the placement of the verb of getting, as well as the presence or absence of proclitic agreement on it, determines the interpretation of the sentence. There is more discussion about the different frames in which serial verb predicates of exchange can appear in 12.5.

\subsection*{12.3.2 Disagreement in 'prefixation'}

While proclitic agreement marking is inevitably 'correct' for the subject of the clause, the consonantal agreement on non-initial verbs does not always agree with the subject of the sentence in some serial verb constructions involving a shared subject, but can reflect the 'neutral' 3SG.F form of the verb. This is most common with verbs with highly syncretic consonantal agreement, such as 'be', 'do' and 'go', and in constructions with these elements.

The following example shows the verb lóe 'get (plural object)' as part of a serial verb construction. This verb participates in the process of vowel alternation (see 7.2.3) to show agreement, and the expected plural subject form, with prefixation added, is rí, attested elsewhere (including in the first clause of this sentence, te rí rí pa 'they get them and'. Instead of this form, in the serial verb construction with ká 'carry' (irregularly tú in the 3PL) the plain, unaltered vowels are heard.
\begin{tabular}{llll} 
te=r-1'-ríl=pa & te=r-oe & tu & me \\
3PL=3PL-PL.get.PL-RED=INSTR & 3PL=3PL-get.PL & carry.PL & 3PL.return
\end{tabular} 3.come

This form of disagreement is rare, but other examples can be found. Note that disagreement is always in terms of the plain form of the verb being used rather than the more highly specified form. There are no instances in my corpus of naturalistic data of the 'wrong' form of vowel alternation appearing where it does not belong, and sentences with such inflections are instantly rejected by any speakers. An example of this would be the sentence shown in (12), modified from (11).
(12) * te=r-í-rí=pa te=we tu me toe

3PL=3PL-get.PL-RED=INSTR 3PL=get.F carry.PL 3PL.return 3.come 'they get them and they take them home, ...'

Other examples of forms of subject disagreement with serial verb constructions (that have been judged grammatical) show disagreement in terms of the 'correct' prefixation not being used, in (13), or both prefixation and vowel alternation not being used, as in (14). In (13), for instance, the verbs á moe re all lack any prefixal agreement: we might expect ká moe ti. In (14) the verb lóe 'get them' in its second appearance lacks both prefixation and vowel alternation (we would expect ri). The prime-marked examples show the 'corrected', maximal agreement patterns.

(13)' Ró=inga yatà ke=li k-á moe ti.
\begin{tabular}{lccc} 
clothes=the & transact & 3SG.NF=do & 3SG.NF-carry return 3SG.NF.go \\
te=r-í=pa & te=loe & fe, \\
3PL=3PL-PL.get.PL=INSTR & 3PL=get.PL & put.down.PL
\end{tabular}
'they get them and they put them down, ...'
(14)' te \(=r-1\) = pa te \(=r-i \quad f e\),

3PL=3PL-PL.get.PL=INSTR 3PL=3PL-PL.get.PL put.down.PL
These examples of disagreement contrast with the case involving serialised motion verbs, in which clitics can appear in multiple locations, as long as they refer to the pronominal features of the same argument, or another form of disagreement described in 7.8, in which the pronominal values of the object show variation between plural and feminine being marked, but do not allow the option of no feature being indexed at all.

\subsection*{12.3.3 Agreement in tense and aspect}

The marking of tense and aspect shows a pattern that is the complete opposite of that found with pronominal agreement. While prefixation is obligatory on all verbs, and procliticisation is optional, and left-dominant, with tense/aspect marking we find that the marking is split between the first verb and the postverbal position with respect to the position of the last verb in the series. Agreement in terms of tense/aspect marking between the verbs is at best unusual, and is considered by most speakers to be outright ungrammatical.

The following examples show the effect of changing the tense/aspect specification in a clause featuring serialised motion verbs (see 7.9 for details of tense/aspect marking).

Past/completed: low tone
\begin{tabular}{lll} 
Pe pe=w-atà & te & líhi. \\
3SG.F & 3SG.F=3SG.F-walk running & 3SG.F.go \\
garden
\end{tabular}
'She walked to the garden.'
* pe pe wata \({ }_{\text {L }}\) te líhi

Irrealis: reduplication
\begin{tabular}{lll} 
Pe pe=w-a-wa & te & líhi. \\
3SG.F 3SG.F=3SG.F-walk-RED & 3SG.F.go & garden \\
'She walked to the garden.' & & \\
* pe pe wa wa te te líhi & & \\
* pe pe wa te te líhi & &
\end{tabular}

Intentional: reduplicaiton + auxiliaries
(20) Pe pe=w-a-wa te líhi tue.

3SG.F 3SG.F=3SG.F-walk-RED 3SG.F.go garden 3SG.F.do
'She wants to walk to the garden.'
(21) * pe pe wa wa tue te líhi
(22) * pe pe wa tue te líhi
(23) * pe pe wa wa tue te te líhi
(24) * pe pe wa wa te te líhi tue
* pe pe wa wa te líhi tue

Continuous: auxiliaries
\begin{tabular}{llllll} 
Pe & pe=w-a & te & líhi & e & tue. \\
3SG.F & 3SG.F=3SG.F-walk & 3SG.F.go & garden & 3SG.F.be & 3SG.F.do
\end{tabular}
'She is walking to the garden.'
(27) * pe pe wa e tue te líhi
(28) * pe pe wa e te líhi tue

Pronominal agreement can be seen as a spreading morphological feature, while tense/aspect is not. Proclitic agreement is a left-edge phenomenon, while auxiliaries are a right-edge one.

\subsection*{12.4 Serial verb constructions involving motion}

When a series of motion verbs are used together to describe an event, their order in the clause follows a strictly ordered sequence, which is more reminiscent of the sorts of templates that have been proposed in morphology than in syntax. This might simply reflect the fact that serial verbs are the sort of construction that straddles the borders of these two 'modules' of grammar.

A relatively simple example of the sorts of serialisation we can encounter is shown in the following sentence. Here the reduplication of the verb re 'go', and the addition of li 'do', is found because of aspectual requirements (see 7.9), and does not reflect anything directly to do with the presence of the verb in a serial verb construction. We can see that there are three verb roots involved, all to do with motion. This is perhaps slightly unusual (since most motion is associated, textually at least, with a purpose, or an activity, either at the start or the endpoint of the motion), but is nonetheless frequently attested.
\begin{tabular}{llll}
\multicolumn{1}{r}{ VERB \(_{1}\)} & VERB \(_{2}\) & VERB3 & (VERB \({ }_{\text {aspectual }}\) ) \\
Nì= moe & hóe & re-re & li. \\
1SG=return & go.landwards & go-RED & do \\
'I want to go back to the land.' & \\
(spoken while riding in a canoe) &
\end{tabular}

In this example, typically representative of this sort of construction, the least specified verb, the general motion verbs specifying only motion towards or motion from the speaker or reference, is the last in the sequence. The first verb might also be thought to be rather generic, in that it does not specify a particular manner or direction of motion, but simply the fact that the motion is headed towards a human residence, in this case the village, situated just behind the beach (see the pictures at the start of the book for aerial views of Skou Mabo, Skou Yambe and Skou Sai).

Other examples will show different combinations of different kinds of verbs, but there are clear emergent patterns in the way in which they combine, reflecting a quasi-templatic structure. Some examples of the sorts of combinations that are frequently encountered are given in the examples below.
\begin{tabular}{llll} 
VERB \(_{1}\) & VERB \(_{2}\) & VERB3 & \\
manner of motion & direction & motion & \\
\(\mathrm{Pe}=\mathrm{w}\)-a tà & p-e & te & Te Bapúbi. \\
3SG.F=walk running & 3SG.F=eastwards & 3SG.F.go & Skou Sai \\
\multicolumn{2}{l}{ 'She ran to Skou Sai.' }
\end{tabular}

With the 'preposition-like' verb há 'from', we find that this verb appears initially in the sequence of verbs, before the source locative that it governs. Following this unit a 'regular' serial verb construction, with centrifugal verbs, manner of motion verbs, directional verbs and motion verbs, can follow, as in (31) (which does not exhibit a manner of motion verb).
\begin{tabular}{|c|c|c|c|c|}
\hline \begin{tabular}{l}
VERBPREP \\
source
\end{tabular} & & VERB \({ }_{1}\) centrifugal & VERB2 direction & VERB3 motion \\
\hline Te=y-á & Te Bapúbi & & hi & to \\
\hline \(3 \mathrm{PL}=3 \mathrm{PL}\)-from & Skou Sai & 3PL.return & westwards & \(3 . \mathrm{co}\) \\
\hline
\end{tabular}
'They came back from Skou Sai.'
Other than this one verb, all other appear in a contiguous sequence. Another typicalexample of this SVC pattern can be seen in (32).
\begin{tabular}{ll}
\(\mathrm{VERB}_{1}\) & \(\mathrm{VERB}_{2}\) \\
manner of motion & motion
\end{tabular}
\begin{tabular}{lll}
\(\mathrm{Pe}=\mathrm{w}-\mathrm{a}\) & te & pá-pè=pe \\
3SG.F=walk & 3SG.F.go & house-3SG.F.GEN=3SG.F.DAT
\end{tabular}
'She walked to her house.'
Table 155xx presents a template that shows what elements can occur in each of the four different slots that defines the template describing pure motion serialisations. This template does not attempt to list all the possible manner of motion verbs that can possibly occur in conjunction with other motion verbs, but for the other columns the lists are complete: these are each a small closed class of between one and four verbs that appears in a fixed position in a serial verb construction. They may all appear outside the motion verb serial verb construction as well, or in other kinds of serial verb constructions, but if they occur in this construction they are both limited as to what may occur paradigmatically to replace them, and limited syntagmatically as to what may surround them.

Table 155. Serialisation of motion verbs: a templatic model


Some example of different combinations of these templatic slots being filled to different degrees can be found in the following sentences:

Centrifugal + manner of motion (1+2)
\begin{tabular}{llll} 
Mó & \begin{tabular}{l} 
péngue=ing a, \\
season \\
mango=the
\end{tabular} & \begin{tabular}{l} 
táng=inga \\
bird=the
\end{tabular} & te=me \\
3PL=return.PL & jíngpa. & fly
\end{tabular}
'And when it's mango season, then those birds fly back.'
Centrifugal + motion (1+4)
Ke=moe ti=inga taíngbe ka.
3SG.NF=return 3SG.NF.go=the money NEG
'Because he's gone back, we don't have any money.'
Manner of motion + direction (2+3)
Ke=angku=fue a háháfa ke=k-íng toe.
3SG.NF=child=that slowly 3SG.NF=3SG.NF-crawl 3.come
'That boy is slowly crawling over here.'
Manner of motion + motion (2+4)
Ke=k-íng ti ùee i li. 3SG.NF=3SG.NF-crawl 3SG.NF.go ladder be do 'He's crawling towards the ladder.'

Direction + motion (3+4)
\[
\begin{array}{lll}
\text { Lí } & \text { te=j-á=ing a=ko } & \text { te=t-e }  \tag{37}\\
\text { festival } \quad \text { 3PL=3PL-hit=the=OBV } & \text { 3PL=3PL-eastwards } & \text { te } \\
\text { 3pL.go } \\
\text { kóeho=ing a. } & \\
\text { border=the } & \\
\text { 'After the festival, then they go back eastwards over the border.' }
\end{array}
\]

Sequences of three contiguous verbs are also commonly attested, though four-verb serial verb constructions, as would be expected from table 155 xx , are not attested. Sentences such as (38) are judged acceptable by Skou speakers, but have not been observed to be spontaneously produced.
(38) ?/\# Tang=ing a ùe te=ko ke=moe pa pí canoe=the sink 3SG.F.go=OBV 3SG.NF=return water swim hóe toe. landward 3.come
'After the canoe sank, he swam back.'
Table xxx 156 shows the ideal (and frequently reaslised) paradigm for a motion serial verb construction, showing clearly that the inflectional paradigm is manifested on each verb in turn, with one clitic serving for the whole group. The aspectual marking 'be' + 'do' sequence is the only non-contiguous part of this construction.

Table 156. Multiple inflections on the components of motion serial verb constructions
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline & NP:SUBJ & PRO=run & seawards & go & beach & be & do \\
\hline 1SG & Nì & nì=hatà & 0 & re & báng & i & li \\
\hline 2SG & Mè & mè \(=m\) atà & \(m 0\) & me & báng & \(m e\) & \(p\) i \\
\hline 3SG.NF & Ke & \(\mathrm{ke}=k\) atà & \(k 0\) & ti & báng & i & li \\
\hline 3SG.F & Pe & \(\mathrm{pe}=w\) atà & po & te & báng & e & \(t u \mathrm{e}\) \\
\hline 1PL & Ne & ne= \(\boldsymbol{n}\) atà & no & ne & báng & \(n \mathrm{e}\) & \(t i\) \\
\hline 2 PL & E & \(\mathrm{e}=\) hatà & 0 & re & báng & e & 1 i \\
\hline 3PL & Te & te=jatà & \(t 0\) & te & báng & e & \(t\) \\
\hline
\end{tabular}

As described in 12.3.2, there are also occasional instances of 'disagreement' in serial verb constructions, especially those involving motion. It is not known whether this reflects some factor in these verbs or these constructions that is particularly prone to disagreement, or if it simply reflects the greater frequency of serial verb constructions with verbs of motion combined with a level of variability in verbal agreement marking.

\subsection*{12.4.1 M otion verbs and purposes or results}

Examining a clause with the complement expressing the purpose of a motion serial verb predicate, we find somewhat unusually that the oblique argument that is simultaneously the location of the action in the complement, and the goal of the motion predicate, can only be coded as a location, that is, at the end of the whole serial construction. This can be seen in the contrast between (39) and (40).
(39) \(\mathrm{Ke}=\mathrm{k}-\mathrm{o}\) ti

3SG.NF=3SG.NF-seawards 3SG.NF.go
'He's gone to play on the beach.'
(40) * ke ko ti báng nà ke oe i li

The structure of (40) can be represented as shown in (40)'. The location, báng, is shown as coordinate to both the purposive clause and the motion clause since it scopes over both of them.

\section*{(40)' [ [motion ] [purpose ] [Location ] ]}

This coding strategy has the effect of keeping all the predicates in the serial verb construction contiguous, which seems to be a requirement in Skou. The use of the third person (singular, feminine) verbs te 'she goes' and toe 'he/she/they come' as aspectual markers has already been described in 7.9.4.

\subsection*{12.5 Serial verb constructions involving transfer}

The use of serial verb constructions with transfer events has two functions. When the verb of transfer itself specifies orientation (leng 'give' specifies that the action is oriented away from the speaker), then the serial verb is used to license the theme argument, since there are no true trivalent verbs in Skou. Examples of this can be seen in (41) - (43). In (43) we can see that leng can be used alone, with the only actants expressed being the agent and the recipient(s). (42) shows that a theme is not grammatical in a clause containing only leng as the predicate. When leng is serialised with ké 'get', however, the theme may be present as a preverbal argument, with the rest of the clause showing the same arrangement as in the non-serial verb clause.
\[
\begin{array}{ll}
\text { Nì=leng } \quad \text { te=bà } & \text { H úele. } \\
\text { 1SG=give } \quad \text { 3PL=person } & \text { Sangke } \\
\text { 'I gave ((some/the) things) to the Sangkes.' } \tag{42}
\end{array}
\]
\begin{tabular}{lll} 
* rabáká \(\quad\) nì=leng \(\quad\) te=bà & H úele \\
tobacco 1 1SG=give & 3PL=person & Sangke
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Rabáká & nì=ké & leng & te=bà & Húele. \\
\hline tobacco & \(1 \mathrm{SG}=\) get & give & \(3 \mathrm{PL}=\) person & Sangke \\
\hline 'I gave & bacco to th & Sang & & \\
\hline
\end{tabular}

It is possible for speakers to orient the action towards themselves with the same verbs, but with a different arrangement, as in (44). Here ké (regularly inflected as kí with a 3PL subject) is used to show the person acquiring the goods, the tobacco, after the act of giving.
\[
\begin{array}{lll}
\text { Nì=leng } & \text { te=H Húele=ing a } \quad \text { rabáká } & \text { te=kí. }  \tag{44}\\
\text { 1SG=give } & \text { 3PL=Sangke } & \text { tobacco }
\end{array} \begin{aligned}
& \text { 3PL=3PL.get } \\
& \text { 'I gave ((the) things) to the Sangkes.' }
\end{aligned}
\]

The other use of serial verbs in transfer events is when there is no inherent orientation specified in the verb of transfer itself. One good example of this can be seen in the following pair of predicates, expressing opposite points of view in a scenario involving commercial exchange, 'buying' and 'selling'. Both use the verb yatàli 'transact' as their primary semantic predicator, but used on its own this can only be interpreted in the sense 'buy'. In order for yatà to be interpreted as 'sell', the event must be more explicitly decomposed into the acts of collecting the goods for sale, transporting them to the point of sale, and only then transacting the sale. This can be seen in (45).
sell: carry - go - transact+do
\begin{tabular}{lll} 
Nì rabáká a re yatà nì \(=\) li. \\
1SG tobacco carry & go transact & \(1 S G=\) do \\
'I sold (some) tobacco.'
\end{tabular}

Some of the options for coding the 'buy' sense of yatà are shown in (46) and (47), where we can see that with no extra morphosyntactic marking the verb is interpreted as 'buy'; complete explicitness can be produced by forming a serial verb construction.
buy: transact+do, transact+do - carry - go
\begin{tabular}{llll} 
Nì & rabáká & yatà & nì=li \\
1SG & tobacco & (Málíl). \\
transact & \(1 \mathrm{SG}=\) do & Mali
\end{tabular}
(47) Nì rabáká yatà nì=li a re pá.

1 SG tobacco transact \(1 \mathrm{SG}=\) do carry go house
'I bought some tobacco and took it home.'
Adding a re 'carry' + 'go' (= 'take') after yatà li can only be interpreted as referring to the removal of the tobacco following its purchase. This indicates the unity of an event that is such a feature of serial verb constructions, since an interpretation of (46) along the lines of 'I sold some tobacco \(\mathrm{o}_{\mathrm{i}}\), and then carried \(\mathrm{it}_{\mathrm{j}}\) home.', with two separate events described, is completely ungrammatical.

Even with the intented reading 'buy', it is preferable to make the predicate more explicit by means of a serial verb construction. While the sentence in (46) is perfectly acceptable, the following is also heard, and is preferred by some speakers:
'buy': more explicit encoding
Nì rabáká yatà nì \(=1 \mathrm{i} \quad\) a \(\quad\) loe.
1SG tobacco transact \(\quad 1 \mathrm{SG}=\) do \(\quad\) carry come
'I bought some tobacco.'

These sorts of serial verb constructions have already been introduced in 3.5, and are discussed further in 12.8.

\subsection*{12.6 Alternative coding serial verb constructions}

One use of serial verb constructions in Skou is not to add an argument that is not otherwise subcategorised for by the verb of the clause, but rather to shift the pragmatic perspective on the arguments that are already present. This productive function is presented here, but an only slightly different construction can be found described in 13.3, where the lexical passive is discussed.

It is a common strategy in many languages for serial verbs to be used to code otherwise not subcategorised-for arguments: in effect, they function in the same role as prepositions or oblique case markers in other languages. Indeed, Foley and Van Valin (1984: 207) note that "[i]n one sense the functions of serial verbs and prepositions/oblique case markers are similar in that they mark NPs which are not normally core arguments of the main verb of the clause." In Skou this generalisation is often an accurate summary of the function of serial verbs, with serial verb constructions employed in predicates involving motion or transfer in order to allow the clause to bear the recipient/goal argument; these constructions are described in 11.4. Another function of the serial verb construction in Skou is quite different to this, in that rather than allowing a new participant to be coded, the serial verb construction allows for an alternative pragmatic function to be coded on an already present (core) argument. In this respect the serial verbs are more like dynamic applicatives in a language that possesses both applicatives and case markers or prepositions to code a non-subcategorised-for nominal (Donohue 2001a), or more like a voice system (see 13.3).

For instance, to give a concrete example of this sort of alternation, consider the following two clauses, both describing the same state of affairs. In the first clause we can see a completely normal encoding of a bivalent event with a subject, an object, and, because it is the only way to express the required predicate semantics, an adjunct nominal bound to the verb. There is no serial verb construction used, with only one predicate and one verb in the sentence.
\begin{tabular}{lll} 
Nì táng pìng nì=|ú. \\
1SG bird bow & \(1 \mathrm{SG}=\) release \\
'I shot a bird.'
\end{tabular}

If we wishes to encode this even with the means of killing marked more peripherally, (50) would be an alternative.
Nì tà=pa táng nì=ká.
1SG arrow=INSTR bird
'I killed a bird with an arrow.'

Alternatively the same event may be encoded in a sentence with two predicates forming a serial verb construction, as seen in (51).
```

Pìng nì=lú=ko táng nì=ká.
bow 1SG=release=OBV bird 1SG=hit
'I shot a bird.'
(glossing literally, 'I fired a bow and hit a bird.')

```

There are both pragmatic and grammatical differences between these two sentences. In the first sentence the adjunct nominal ping simply specifies the action indicated by the verb, firing a bow as opposed to kicking (expressed as làng lú 'leg release'), or throwing a ball (hangléúelú 'ball release'). Any prominence or discourse salience assigned to a portion of the clause will fall on the subject or the object, but not on the attributive ping, which is arguably not an argument, but simply part of the predicate (see 14.4).

In the second sentence, by contrast, there are two verbs, with two different objects and a single shared subject. Since ping is no longer coded as part of the predicate, but rather as the object of a verb of its own, it is grammatically eligible to receive more pragmatic prominence. These are exactly the opposite conditions that a pronoun must meet in order to be assigned deictic markers indicating pragmatic salience. See 4.7 .1 for a discussion of the different ways in which deictics are restricted in their appearance with pronouns bearing different syntactic functions. The fact that this construction contrasts with the adjunct nominal construction means that ping is interpreted with greater pragmatic prominence than otherwise.

Furthermore, in the second sentence the fact that ping is the head of an NP, and not simply an adjunct nominal, means that it may be marked with any modification that the speaker deems necessary for adequate communication of his or her ideas. Some examples are shown below.
\[
\begin{array}{llll}
\text { Pìng=ing a } & \text { nì=lú=ko } & \text { táng } & \text { nì=ká. } \\
\text { bow=the } & 1 \mathrm{SG}=\text { release=OBV bird } & 1 \text { SG-hit } \\
\text { 'I shot the bow at a bird.' } & & \tag{53}
\end{array}
\]
Pìng bápá(ne)-mè=me ke=li
bow friend(1SG.DAT)-2SG. GEN=2SG.DAT \(\quad\) 3SG. NF=do
nì=ne=fue lú=ko táng nì=ká.
1SG. GEN=1SG.DAT=that \(\quad\) 1SG=release=OBV bird \(1 \mathrm{SG}-\mathrm{hit}\)
'I shot the bow that your friend made for me at a bird.'

We can see that prominence can be coded on ping not only through the contrast of the object construction with the adjunct nominal construction, but also through the ability of the noun in an object NP to take modification that is not allowed for the nominal in an adjunct nominal position (The first factor is similar to Jacobson's discussion of xxxxxxxxxxx. Bresnan?).

Another example of the use of these sorts of serial verb constructions to render a slightly different pragmatic effect on the sentence can be seen in the following pair. The first is an
unproblematic bivalent clause, with a subject and an object (though there is no independent pronoun for the feminine subject, which is shown solely by means of verbal agreement).
```

Nì pe=w-á.
1SG 3SG.F=3SG.F-hit

```
'She hit me.'

The alternative to this coding strategy does not see a change in the syntactic roles of the two arguments in (54), but adds a second predicate encoding not the action but the result of the striking. This alternative, complex, coding strategy puts more pragmatic emphasis on the affected party, and serves a similar function to that played by the passive in languages such as English.
\begin{tabular}{llll} 
(55) & Nì \(\quad\) pe=w-á=ko & mòng & nì=wí. \\
1SG 3SG.F=3SG.F-hit.=OBV & affect & 1SG=get
\end{tabular}

The nominal mòng is not attested except in serial verb constructions such as that seen here or in the passive construction (see 13.3), and so cannot be easily defined. Only the fact that the verb wé is regularly attested as the feminine object form of the verb 'get, obtain' allows us to hazard a guess at the possible semantics of mòng wí (review also the rules for mid-vowel raising in high-tone environments, making the prospect of a shift from é to í highly plausible - 2.2.3). A similar serial verb construction with a patient subject, using the same verb but without the nominal, is also found, as in (56) and (57). Here the elided P of the first predicate is the affected subject of the wí predicate.

\begin{tabular}{lll} 
Pe & ke=láng=ko & \(p e=w i ́ l\) \\
3SG.F & 3SG. \(\mathrm{NF}=\mathrm{hit} . \mathrm{F}=\mathrm{OBV}\) & 3SG. \(=\) =get \\
'He hit her (effectively).' &
\end{tabular}

As should be expected, this is an alternative to a simple monoverbal sentence with the kicked person marked as the object of the first verb. Just as the sentences with mòng wí, the pragmatic function of the sentence in (56), when compared to a simpler sentence such as (58), is to put more emphasis on the patient, rather than the agent.
\begin{tabular}{lll} 
Ke làng & nì=lú. \\
3SG.NF leg, & 1SG=release
\end{tabular}

Similarly, and also coincidentally using the verb lú 'release', the various predicates of throwing allow for more than one coding choice. As can be seen in the translations of the following sentences, the interpretation is different with each different serialisation construction
release + throw.at
\begin{tabular}{lll} 
Wúng nì=lu & hí & naké. \\
stone \(1 \mathrm{SG}=\) release & throw.at & dog \\
'I threw a stone at the dog.' &
\end{tabular}
release \& release + throw.at
Wúng nì=lú=ko nì=lu hí naké.
stone \(1 \mathrm{SG}=\) release=OBV 1SG=release throw.at dog
'I threw a stone at the dog (deliberately).'
release \& hit
Wúng nì=lú=ko naké nì=ká.
stone \(1 \mathrm{SG}=\) release \(=\mathrm{OBV}\) dog \(1 \mathrm{SG}=\) hit
'I threw a stone at the dog (and hit it).'
Note that some of the sentences above use the morpheme \(=k 0\), otherwise found in switchreference environments. This might be thought of as evidence that we are, in fact, dealing with two separate clauses, and not an instance of a serial verb construction inside a single clause. It is more likely, however, that this is a construction similar to the serialising na that has been reported for Tok Pisin (see, for example, Lynch 1994). These complex verbal predicates may not also be combined with an affecting serialisation with mòng wí.
(62) * wúng nì lú ko nì lu hí naké mòng ke wí

Another popular way to translate Indonesian or Papuan Malay passives that include the agentive by-phrase is with a topicalised A, as in (63)
```

Mè=a, nì mè=b-á.
2SG=PROM 1SG 2SG=2SG-hit
'You hit me.'
(Papuan Malay: `Saya dapa pukol deng kau.' - see (67) below)

```

The different correspondences between the roles of the arguments in different alternative serial verb constructions are summarised in table 157 xx . We can see that the subject is never coded as anything else, and that nothing can be recoded as an adjunct nominal, but that most other possibilities are found. The lack of a construction in which an adjunct nominal is recoded as a subject reflects the fact that these constructions are only found with involuntary state predicates.

Table 157. Grammatical role correspondences
\begin{tabular}{lccc}
\hline \hline & \multicolumn{3}{c}{ Biverbal } \\
Monoverbal & SUBJ & OBJ & ADJ.N \\
\hline SUBJ & \((\sqrt{ })\) & & \\
OBJ & \(\sqrt{ }\) & \(\sqrt{ }\) \\
ADJ.N & & \(\sqrt{ }\) \\
\hline \hline
\end{tabular}

Other syntactic oddities in a related structure involving a serial verb construction with the complex predicate mòng wí 'get' are described in 13.3.

\subsection*{12.6.1 A comparison with an eastern \(M\) alay passive}

While the variety of Malay spoken in the area where Skou is spoken does not have a passive construction, other north Papuan Malay varieties do. It is attested in Serui Malay, for instance, an area that is well-known to Skou people (see text 20 in appendix 4).

In Serui Malay the passive is formed with the auxiliary dapa 'get, receive, (be) affect(ed)', and an agentive by-phrase, if present, is marked with the cinstrumental/comitative' deng 'with'. This yields the following alternations:
(64) Laki=tu pukol bini tu. man=that hit woman that 'The man hit the woman.'
(65) Bini=tu dapa pukol (deng laki tu). woman=that get hit with man that 'The woman was hit (by the man).'

In the light of this comparison, it is worth noting that when translating Skou into Papuan Malay speakers use an active sentence when translating sentences such as (54), and the passive for sentences such as (55). These Papuan Malay equivalents are shown below.

De=pukol kita.
(loose translation of (54))
3SG=hit 1SG
'She hit me.'
```

Sa=dapa pukol.
(loose translation of (55))
1SG=get hit
'I was hit.'

```

An alternative to the passive is a biclausal construction, which mirrors quite closely the structure found in Skou.
(68) De=pukol trus sa=dapa. (alternative translation of (55)) \(3 \mathrm{SG}=\) hit and \(1 \mathrm{SG}=\) get
'I was hit by her.'
More discussion of the the aspects of the mòng wí construction that lead to a passive analysis can be found in 13.3.

\section*{12.7 fa 'use, employ'}

The pleonastic verb fa is, apart from li 'do', the most widely employed light verb in the language. Unlike li, fa can be used with full NPs, and not just simple Ns or N's, implying that the formations involving fa are formed in the syntax, and not in the lexicon. That said, there are some collocations with fa that may alternatively be coded with li, provided they are not full phrasal units.

Some examples of sentences with predicates that employ fa 'use' are shown below. In the first sentence we can see the NP pílang tè i 'their different language' forming a predicate with the light verb. In the second the plain noun ong 'deception' is used with fa.
(69) Te Húng te=ra pílang-tè i fa. Sentani 3PL=also language-3PL.GEN different USE 'The Sentanis use a (really) different language.'
\[
\begin{array}{llll}
\text { Ong } \quad \text { nì=fa } & \text { ko } & \text { tue } & \text { Te Ó eti. }  \tag{70}\\
\text { deception 1SG=USE } & \text { be.at } & \text { 3SG.F.do } & \text { 3PL=Wutung } \\
\text { 'I fooled those Wutungs.' } & &
\end{array}
\]

In some cases the construction using fa appears to be identical. in meaning at least, to an adjunct nominal + light verb combination (see chapter 14). For instance, one possible paraphrase of (70) would be the sentence seen in (71), which is identical in all respects to (70) except for the use of the general light verb li rather than fa.
\[
\begin{array}{llll}
\text { Ong } & \text { nì=li } & \text { ko } & \text { tue }  \tag{71}\\
\text { deception } & \text { 1SG=do } & \text { Te ó eti. } \\
\text { de.at } & \text { 3sG.F.do } & \text { 3PL=Wutung } \\
\text { 'I fooled those Wutungs.' } & &
\end{array}
\]

We should not, however, consider fa to be simply a more restricted variant of the light verb li. In some cases there is no equivalent paraphrase for a particular predicate using a light verb. In (73) we can see that fa can appear with ephemeral body parts to indicate their existence, while this is not possible for li.
\[
\begin{align*}
& \text { Mè kúeta mè=fa. }  \tag{72}\\
& 2 \mathrm{SG} \text { beard } 2 \mathrm{SG}=\mathrm{USE} \\
& \text { 'You've got a beard.' } \\
& \text { * mè kúeta mè }=\text { pi. }  \tag{73}\\
& 2 \mathrm{SG} \text { beard } 2 \mathrm{SG}=2 \mathrm{SG} . \mathrm{do}
\end{align*}
\]

The opposite case is also true, and in greatly increased numbers. There are, it seems, many more nominals that can combine with li than there are those that can combine with fa to result in a well-formed predicate. The following is just one instance, but the examples in chapter 14 give a good idea of the range and productivity of II .
\[
\begin{align*}
& \text { Mè angku mè=pi. }  \tag{74}\\
& \text { 2SG child } 2 \mathrm{SG}=2 \mathrm{SG} . \text { do } \\
& \text { 'You've got a child.' } \\
& \text { * mè angku mè=fa. }  \tag{75}\\
& 2 \mathrm{SG} \quad \text { child } 2 \mathrm{SG}=\mathrm{USE}
\end{align*}
\]

Other cases, such as the first example in this section, show that fa can occur with a complex NP. The adjunct nominal construction only occurs with simple nominals, and so cannot be thought of as the same process. Compare the sentence in (76), which has the complex NP pílang tè i 'their different language', with the ungrammaticality of a paraphrase with li 'do', even though there is an adjunct nominal construction using that light verb with the unqualified nominal pílang 'language', seen in (77).
\begin{tabular}{clll} 
* te Húng te=ra pílang-tè & i & (te=)ti \\
Sentani 3PL=also language-3PL. GEN & different & 3PL=3PL.do
\end{tabular} 'The Sentanis use a (really) different language.'
TeHúng te=ra pílang te=ti.

Sentani 3 3PL=also language
'The Sentanis speak a language.
The verb fa is also used, in conjunction with a normal predicate, to form a continuous and exclusive sense, 'do the predicate, and nothing else'. An example of this use can be seen in (78). Here the verb ha tà 'run' is combined with fa and the aspectual auxiliaries ili 'be + do', to yield the predicate 'running about aimlessly/purposelessly'.
(78)
Nì=ha tà \(\quad\) fa \(\quad\) i li.
1SG=walk running
USE be do
'T'm just running about (without any particular purpose).'

When the predicate has an adjunct nominal, there are two options for the position of fa, either following both the adjunct nominal and the verb, or following just the adjunct nominal. Both these options are shown below:
\[
\begin{array}{llll}
\text { Nì=lú weng } & \text { fa } & \text { i li. }  \tag{79}\\
\text { 1SG=eye sleep } & \text { USE } & \text { be do } \\
\text { 'I was just sleeping.' }
\end{array}
\]
(79)' Nì lú fa weng i li.
(80) Nì=moeng fa moeng-moeng.
\(1 \mathrm{SG}=\) sit USE sit-RED
'I'm just sitting about.'
It might be thought that this appearance of fa is in fact the focal marker =fa 'only' (see 4.7). If this were true it would be the only case of a focal marker appearing on a predicate, and the only case of an adjunct nominal appearing modified in any way, though the fact that there is variation in the placement of the fa, and that adjunct nominal + verb constructions also display variation in the placement of pronominal clitics, makes that a weaker argument than might be hoped for.

Another use of fa is to mark an incontrovertible, habitual sense, to indicate events that are the natural order of things and which will always be so. Some examples of this sense are shown in (81) and (83) - (84).
(81) Fu ma fa. rain rain.falls USE
'Rain falls.'
Compare this with (82), which does not have fa, and which lacks the generic meaning.
(82) Fu ma. rain rain.falls 'It's raining.' / 'It rained.'
\[
\begin{array}{lllll}
\text { Féng lang ro=pa } & \text { láng } & \text { ne=M áwo } & \text { ke=ká } & \text { fa. }  \tag{83}\\
\text { wind east.wind season=INSTR } & \text { east.wind } & \text { 1PL=Mabo } & \text { 3SG.NF=hit } & \text { USE } \\
\text { 'When it's the east wind season the wind blows on us.' } & &
\end{array}
\]
(84) Te=Táng te=toe=ko fítong-nè=ne léng te fa. 3PL=bird 3PL=3.come=OBV land-1PL.GEN=1PL.DAT lost 3SG.F.go USE 'Whenever the Indonesians come we lose (more of) our land.'

\subsection*{12.8 Transfer collocations with serial verb constructions}

The most common collocationary patterns found with serial verb constructions involve movement and transfer. We have already seen that most verbs describing a manner of motion do not allow for a goal, and must serialise with a verb specifying a particular direction of motion, or a generic motion verb, in order to appear in the same clause as a goal oblique.

Similarly, most predicates indicating transaction are expressed with serial verb construction, usually, but not always, involving a verb of motion.

An example of this can be seen in (85). Here the encoding of what is translated into English as 'take' is decomposed in Skou into the lexical units ké 'get', a 'carry', and re 'go':


The other very common area for serial verb collocations involves motion verbs, particularly combinations that see a directional verb combining with a manner-of-motion verb, or a motion verb with a transfer verb, or variations on these themes. These have already been discussed in 12.4, and one example of each will suffice to show the kind of serialisation.
\begin{tabular}{lll} 
& DIRECTION & MOTION \\
Jepa[n] \(]\) & \begin{tabular}{l} 
hoe \\
Jopan
\end{tabular} & toe, \\
come.landwards
\end{tabular} 3.come
'So the Japanese came, ...'
GET
\begin{tabular}{llll} 
Te=r-í=ko & tang=ing & pì & ung=pa \\
3PL=3PL-get.PL=OBV & canoe=DEIC & full & now=INSTR
\end{tabular}
'They get them in and fill up the canoe, ...'
\begin{tabular}{lllll} 
CARRY & CENTRIFUGAL DIRECTION & MOTION & \\
te=r-e-tu & me & hoe & toe & báng=pa, \\
3PL=3PL-carry.PL & 3PL.return & come.landwards & 3.come & beach=INSTR \\
'they carry them back to the beach, and, ...' & &
\end{tabular}

In (87) the small clause tang ing pì shows the result of the action te rí, referring to placing caught fish in the boat: the caught them such that the canoe was filled.

\subsection*{12.9 Summary: the syntax of serial verb constructions}

In this chapter we have seen that there are many instantiation of what might be called 'serial verb constructions' in Skou. There are, however, very few morphosyntactic commonalities between these different uses, making it appear that the notion 'serial verb construction' is simply an epiphenomenon: while there are several types of multi-verb predicates, there does not seem to be anything in common between them in terms of morphosyntactic definitions, certainly nothing that can be used to exclude other constructions which do not appear to warrant being called serial verb constructions.

For instance, the applicative -na is treated here as being an instance of morphological valency increase, and is discussed as such in the next chapter. An alternative analysis would might consider the na to be an abstract verb that is never realised independently, but only appears bound to another verb. This would then treat the applicative construction as an instance of serialisation as well. This line of argumentation has not been pursued here.

\section*{Appendix 2 Verbal paradigms}

\section*{XXXXXXXXX}

\section*{A2 Types of verbal inflection}

Given that all verbs inflect by proclitic, and that the form of the proclitic does not show any variation from one verb to another, always appearing in the same shape, the only variable that this agreement marker shows is its placement with respect to adjunct nominals, which will be discussed in A2.4. The other inflectional devices, prefixation and vowel change, show more variation. A verb can select for inflection by prefixation or inflection by vowel alternation independently, as seen in table 183xx.

Table 183. Inflectional possibilities
\begin{tabular}{lcc}
\hline \hline & - Vowel change & + Vowel change \\
\hline - Prefix & A2.1.1 & A2.1.2 \\
+ Prefix & A2.2.1 & A2.2.2 \\
Suppletion & & A2.3 \\
\hline \hline
\end{tabular}

Examples of verbs that fit into these categories have been discussed in xx.xx, and some representatives of each cell are shown in table 184xx.

Table 184. Verbs illustrating different inflectional possibilities
\begin{tabular}{llc}
\hline \hline & - Vowel change & + Vowel change \\
\hline - Prefix & \(e\) 'board' & moeng, mong, meng 'sit' \\
+ Prefix & \(e\), me, ke, pe, ne, \(e\), & lúe, púe, lúe, rú, rúe, lúe, \\
te 'go east' & rílhear' \\
Suppletion & & A 2.3 \\
\hline \hline
\end{tabular}

The following sections will present many further examples of verbs that fit into each of these four categories.

\section*{A2.1 Non-prefixing verbs}

The verbs that do not have a prefixing paradigm show a simple set of inflections, minimally consisting of the proclitic for subject, and in some cases also involving vowel alternations (see xx.xx for a discussion of the reference of vowel alternations in verbs). Both groups of verbs will be illustrated and listed here.

\section*{A2.1.1 Non-prefixing non-Vowel alternation verbs}

Verbs with no prefixation and no vowel alternations all show the same simple paradigm of proclitic agreement for subject; the phonological shape of the root does not affect the shape or presence of a clitic agreement marker. This has been described in 7.2.1 and 7.3.1, and is completely regular. For this reason no listings of paradigms will be given, only examples of verbs that fit this description. For details on the morphology of proclitic inflection, see 6.3.3 and 7.2.1.
\begin{tabular}{ll} 
báng & 'crack' \\
bìue & 'watch over \\
bóe & 'fight' \\
\(e\) & 'board' \\
è na & 'try' \\
fátí & 'lay down' \\
fé & 'lay anchor' \\
fé & 'perch' \\
fé & 'place on a platform' \\
fí & 'meet' \\
fue & 'cry' \\
fue & 'see' \\
fu & 'fear' \\
hí & 'wash' \\
hóe & 'go south' \\
húe oeng & 'think, feel' \\
ing & 'dig up' \\
jí & 'break' \\
jíng & 'open' \\
jíngpa & 'fly' \\
ke fá ko \(l i\) & 'wear (on arm)' \\
kéng re & 'go outside' \\
kí & 'scream' \\
kúe & 'dig' \\
lemà pé & 'criticise' \\
léngho & 'be surprised' \\
lú fi & 'cough' \\
lú weng & 'sleep' \\
\hline
\end{tabular}
\begin{tabular}{ll} 
nà oe & 'play' \\
mà me & 'ridicule' \\
moe & 'return' \\
moeng & 'sit' \\
òe & 'jump' \\
ong fa & 'deceive' \\
pa pi & 'swim' \\
pà & 'scratch' \\
páng & 'chop (many)' \\
pé (i) & 'put down' \\
peng & 'forget' \\
pi & 'tie (sago thatch)' \\
pí & 'stop (of rain)' \\
pí & 'flow out (of water)' \\
pong & 'blow (at fire)' \\
pung & 'butcher' \\
rapu & 'rub' \\
rapue & 'descend' \\
tajíng & 'push' \\
tóe li & 'prepare' \\
ùe pung & 'marry' \\
wá & 'plant' \\
wang & 'die' \\
yang & 'vomit' \\
yáng & 'sick,' \\
yatá & 'steal' \\
yatà & 'buy, sell' \\
yú & 'search for',
\end{tabular}

\section*{A2.1.2 Non-prefixing verbs with vowel alternation}

Vowel alternation as a means of indicating either plurality or femininity of the subject (or, if the verb is bivalent, the object) has been described in 7.2.3. The different paradigms of alternations found, both regular and irregular, are listed in table 185xx. In this table non-alternating material that might have been expected to show changes, based on the patterns seen in A2.2.2, is shown in bold.

Table 185. Non-prefixing verbs that show vowel alternations
\begin{tabular}{|c|c|c|c|}
\hline \multicolumn{2}{|l|}{Base} & Feminine & Plural \\
\hline a wa li & 'raise' & \multirow[t]{2}{*}{pu wa tue e} & \multirow[t]{2}{*}{tu wa tie} \\
\hline exxxxxxx & & & \\
\hline \(x x x\) & & & \\
\hline fu & 'afraid' & \(f u\) & \(f e\) \\
\hline fue & 'see' & fu & fi \\
\hline fue & 'cry' & fu & fue \\
\hline kúe & 'dig' & kúe & kí \\
\hline lú weng & 'sleep' & ló weng & lé weng \\
\hline moe & 'return' & moe & me \\
\hline moeng & 'sit' & mong & meng \\
\hline òe & 'jump' & ò & òe \\
\hline wang & 'die' & wang & wing \\
\hline
\end{tabular}

Some of the irregularities can be explained. It seems that there is a suppletive form of the verb for some categories, and in these cases the general verb, where it may be used, will not shown vowel alternations.
```

XXXXXXXXX

```

\section*{A2.2 Prefixing verbs}

While there are only five possibilities for prefixes on verbs in Skou, the fact that in most cases these have historically fused with initial consonants in the verb root (over \(80 \%\) of verbs in Skou are consonant-initial) means that the paradigms appear on the surface to be quite irregular.

\section*{A2.2.1 Prefixing verbs}

The majority of verbs in Skou show alternations that can be ascribed to underlying prefixes, and do not show vowel alternations. These have been described in 7.2.2, where they were divided up into five classes on the basis of the apparent underlying onset (or lack of it) in the verb. Following the same classification into vocalic, bilabial, lateral, velar and glottal paradigms, table 186xx shows the members of each of the sub-classes for these paradigms. In each case the arrangement is from most to least frequently attested.

Table 186. Inflection by prefix
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline Vocalic-a & k
\(\varnothing\) & \(m\)
\(m\) & k
k & p
p & n
n & \(\varnothing\)
\(\varnothing\) & t
t & \(a\) 'carry' (optionally the same inflection as \(a\) 'raise'), ang 'eat' \(a\) 'raise' \\
\hline \multirow[t]{2}{*}{-e} & n & m & k & p & n & \(\emptyset\) & t & \(e\) 'refuse' \\
\hline & \(\emptyset\) & m & k & p & n & \(\emptyset\) & t & \(e\) 'go east' \\
\hline -i & \(\emptyset\) & m & \(\emptyset\) & \(\emptyset\) & n & \(\emptyset\) & \(\emptyset\) & \(i ' s t a n d '\) \\
\hline -o & \(\emptyset\) & m & k & p & n & \(\emptyset\) & t & \(o\) 'go seawards' \\
\hline -oe & \(\emptyset\) & m & k & \(\emptyset\) & \(\emptyset\) & \(\emptyset\) & \(\emptyset\) & oeng 'remember' \\
\hline \multirow[t]{3}{*}{Bilabial} & w & p & w & w & w & w & w & wé 'get.F' \\
\hline & w & w & w & p & w & w & b & wung 'die' \\
\hline & w & m & w & w & w & w & w & hì wá 'call' \\
\hline \multirow[t]{9}{*}{Alveolar} & 1 & p & 1 & r & r & 1 & r & lóe 'shave', lúe 'hear', loe 'get.PL', nalùng 'teach', lú 'release', lóeng 'say', lúe 'chop up', nalu 'pound', lélúe2 'annoy', loehí 'load', ì lú 'complain', kalèng 'look about', lóe 'pick fruit', lúefa 'exceed', lúhi 'hammer', \\
\hline & 1 & p & 1 & w & r & 1 & r & lo hí 'hit', lá 'roast', lèng 'hide self' \\
\hline & 1 & p & 1 & w & t & 1 & t & láng 'hit.F' \\
\hline & 1 & p & 1 & w & t & 1 & j & lang 'narrate' \\
\hline & 1 & p & 1 & w & y & 1 & y & làng 'chop.F' \\
\hline & 1 & p & 1 & w & 1 & 1 & t & \(l e ́ ~ ' f e l l ' ~\) \\
\hline & 1 & p & 1 & w & 1 & 1 & 1 & lá 'utter', lèng 'be quiet', la 'erect fence' \\
\hline & 1 & p & 1 & t & t & 1 & t & li 'do', lí 'boil', li 'be angry at', \\
\hline & 1 & p & t & t & t & 1 & t & loe 'come', lél lúe 'annoy' \\
\hline \multirow[t]{2}{*}{xxxxx} & 1 & p & 1 & p & r & 1 & r & leng 'hide' \\
\hline & 1 & p & 1 & p & t & 1 & t & loe 'work' \\
\hline Velar & k
k & b & k
k & w
w & k
k & k
k & k & ké 'get', ku 'stab', kepu 'wear hat', hèng ká 'accuse' ká 'hit' \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline Glottal & h & m & k & w & n & h & y & ha 'walk', há 'beat', há 'from', tahùng 'seat self', há1 \(h i_{2}\) 'count'. hù 'weave', ná hú 'paddle', hó 'peel', hi ta lúe 'halt' \\
\hline & h & m & k & w & n & h & j & háte 'close', nàhi 'hate', ráue há 'laugh', hóeng 'wait' \\
\hline & h & m & k & w & n & h & t & héng 'ask', ha lú 'pull', há 'stand' \\
\hline & h & m & k & w & n & h & h & hi 'go west' \\
\hline & h & m & k & w & b & h & y & hue 'tread on' \\
\hline & k & m & k & w & n & h & y & hung 'drink', \\
\hline
\end{tabular}

\section*{A2.2.2 Prefixing verbs with vowel alternation}

The following verbs, in addition to the prefixing patterns seen in table 186xx, also show inflection by means of vowel alternations.
\begin{tabular}{llll} 
hi ta lúe & 'halt' & lóeng & 'tell' \\
\(i\) & 'stand' & lúe & 'hear' \\
ì lú & 'moan' & lúe & 'chop' \\
kú re & 'fall' & lúefa & 'exceed' \\
le lue & 'lie to someone' & luhí & 'hammer' \\
lé & 'chop down' & oeng li & 'remember' \\
lélúe & 'annoy' & pílóeng & 'praise' \\
lóe & 'shave' & re & 'go' \\
lóe & 'pick (fruit)' & wung & 'die' \\
loehí & 'load' & ké & 'get'
\end{tabular}

The vowels found in the alternations are shown in table 187xx:

Table 187. Common vowel alternations
\begin{tabular}{|c|c|c|c|c|}
\hline & Plain & Feminine & Plural & Example verbs: \\
\hline \multirow[t]{8}{*}{Regular:} & \(i\) & ие & \(i\) & \(l i ~ ' d o ' ~\) \\
\hline & \(e\) & иe & \(i\) & \\
\hline & eng & ung & ing & leng 'give' \\
\hline & иe & \(u\) & \(i\) & lue 'hear', fue 'see', lúe 'chop up', hi ta lúe 'halt', le lue 'lie to', lúefa 'exceed' \\
\hline & oe & ue & \(i\) & lóe 'shave', loehí 'load' \\
\hline & oeng & ung & ing & lóeng 'speak' \\
\hline & u & \(o\) & \(e\) & fu 'fear', lu 'sleep' \\
\hline & \(o\) & \(o\) & \(e\) & ko 'hide' \\
\hline \multirow[t]{4}{*}{Defective:} & \(e\) & \(e\) & \(i\) & ké 'get' \\
\hline & ue & ue & \(i\) & kúe 'dig', lélue 'narrate' \\
\hline & ие & \(u\) & ue & fue 'cry' \\
\hline & oe & иe & oe & lóe 'pick' \\
\hline \multirow[t]{10}{*}{Irregular:} & oeng & ong & eng & moeng 'sit', oeng 'remember' \\
\hline & oe & oe & \(e\) & moe 'return' \\
\hline & ung & ang & ing & wung 'die' \\
\hline & \(u\) & \(u\) & \(o\) & luhí 'hammer' \\
\hline & ang & ang & ing & wang 'die' \\
\hline & \(a\) & \(u\) & \(u\) & a wa li e 'raise', ká 'carry', háyu 'chase' \\
\hline & oe & \(o\) & oe & òe 'jump' \\
\hline & \(i\) & \(e\) & \(e\) & \(i\) 'stand' \\
\hline & \(e\) & \(i\) & \(i\) & lé 'fell' \\
\hline & \(u\) & \(u\) & \(i\) & ì lú 'complain' \\
\hline
\end{tabular}

XXXXXXX

\section*{A2.3 Verbs with suppletive forms}

While some verbs have completely suppletive forms for either plural object or feminine object, they are not many in number. The following have been found so far:

Table 188. Suppletive verb forms

Object is:
\begin{tabular}{cccc} 
& & Plain & Feminine \\
'get' & Plural \\
& 1SG & ké & wé \\
2SG & bé & lóe \\
& 3SG. NF & ké & wé \\
3SG.F & wé & lóe \\
& 1PL & ké & wé \\
& 2PL & kée & wé \\
& 3PL & ké & wé \\
& & & lóe \\
& & &
\end{tabular}

\section*{XXXXXXXX}

A2.4 The position of the proclitic with respect to adjunct nominal placement This is discussed in 14.5.

\section*{A2.5 Complete paradigms}

XXXXXXXXXX

\section*{Appendix 3 Acoustic data on tones and vowels}

The analysis presented in chapter 2 suggested seven contrastive vowels, with overlapping allophones, and seven contrastive tonal patterns made up of five tone melodies and variable assignment of the tone melodies to the syllables (= tone bearing units) for one of them. Since this is an analysis that exceeds the norms for languages of New Guinea, some acoustic data has been presented to back up the claims made in the earlier chapter. In this appendix I shall give both fundamental frequency \(\left(\mathrm{F}_{0}\right)\) tracings of utterances representing the different tonal contrasts on words of one, two and three syllables. The following \(\mathrm{F}_{0}\) tracings have all been taken from recordings of a single speaker, a native of Skou Mabo. They represent natural speech: no attempt was made to collect citation tones in an 'artificial' environment, and all the \(\mathrm{F}_{0}\) and formant tracings have been culled from texts and recorded conversations. The extraction of acousitc information has been made with the speech analysis software Praat. 69

\section*{A3.1 Tone}

In chapter two I posited three distinctive pitch contours, which represent the realisation of five tonal melodies that are mapped onto word-level units. In this section I shall present examples of the fundamental frequency correlates of these contours.

\section*{A3.1.1 Monosyllables}

The first group of fundamental frequency tracings show monosyllabic words with the three different pitch contours, high, low and falling. They are presented in both phrase-internal and phrase-initial positions, in order to show the effect of the phrase boundary tones on the \(\mathrm{F}_{0}\).

Contrasts between the three different pitch contours found on monosyllables can be seen in the following \(\mathrm{F}_{0}\) tracings of three segmentally identical words.

In the first word, which has a lexically-assigned low tone, we can see that the pitch contour starts quite low, and shows a gradual fall through the word. This fall is intonational, and not part of the phonological specification of the tone.

\footnotetext{
69 At the time of writing this software is available at www.praat.org. The technical specifications for the software are also available at this site in downloadable format.
}
\begin{tabular}{|c|c|c|}
\hline \multicolumn{3}{|c|}{pa 'water'; L tone} \\
\hline 200 & & \\
\hline 175 & & \\
\hline 150 & & \\
\hline N 125 & & \\
\hline ᄃ 100 & & \\
\hline 75 & & \\
\hline - 50 & & \\
\hline 25 & & \\
\hline 0 & & \\
\hline 0 & & 0.205782 \\
\hline & Time (s) & \\
\hline
\end{tabular}

The next word, pá 'house', has a lexically assigned high tone. Here the \(\mathrm{F}_{0}\) at the beginning of the word has a much higher peak, and the fall that it displays is much less severe than that seen in words like 'water'. The specification of a high tone then appears to involve a greater component of targetting than does that for a low tone. This is just one of the reasons that it might be better to think of low tones as being in fact the phonological absence of assigned tonal units. See \(2 . \mathrm{xx}\) for more discussion of this point.


The next word, pà 'cult house', has a falling tone; in terms of tonal units, it is assigned a HL tone melody. The fall associated with this word is noticeably sharper than with a simple H tone, and the duration of the word is also significantly less than either of the other two tones.
\begin{tabular}{|c|c|c|}
\hline \multicolumn{3}{|c|}{pà 'cult house'; HL tone} \\
\hline \multicolumn{3}{|l|}{200} \\
\hline \multicolumn{3}{|l|}{175} \\
\hline \multicolumn{3}{|l|}{150} \\
\hline \multicolumn{3}{|l|}{N 125} \\
\hline \multicolumn{3}{|l|}{ᄃ 100} \\
\hline \multicolumn{3}{|l|}{75} \\
\hline \multicolumn{3}{|l|}{- 50} \\
\hline \multicolumn{3}{|l|}{\multirow[t]{2}{*}{25}} \\
\hline \multicolumn{3}{|r|}{\multirow[t]{2}{*}{000.184989}} \\
\hline & & \\
\hline & Time (s) & \\
\hline
\end{tabular}

Comparing these three F0 tracings, the following points are most relevant to an understanding of the differences between them, from an acoustic point of view:

\section*{XXXXXXXX}

\section*{A3.1.1.1 High pitch words}

The high pitch represents an underlying H tone melody assigned to a monosyllable. It is realised by a predominantly high pitch over the voiced portion of the syllable, though there can be a noticeable rise in pitch at the start of an utterance.
with a phonological H tone melody. Those found phrase-medially show a level high pitch móe 'fish'



\section*{A3.1.1.2 Low pitch words}

Words with low pitch are characterised by an \(\mathrm{F}_{0}\) pattern that is extremely subject to variation based on the intonation contour of the sentence. In chapter 2 we discussed the analysis under which many low-toned words can be viewed as being tonally unspecified, xxxxxxxxxx xxx 'bad'


\section*{A3.1.1.3 Falling pitch words}

Falling pitch is always realised by a higher than average \(\mathrm{F}_{0}\), and a fall in that \(\mathrm{F}_{0}\). In many cases, when there is a following low-pitched syllable in an adjacent word, the falling contour continues over both syllables, witht he phonologically low-pitched syllable dropping to a very low frequency.

fèng 'bad'



bà 'person'

\(k a\) 'not'


\section*{A3.1 Tone}

In chapter two I posited three distinctive pitch contours, which represent the realisation of five tonal melodies that are mapped onto word-level units. In this section I shall present examples of the fundamental frequency correlates of these contours.

\section*{A3.1.2 Disyllables}

Disyllabic roots show more contrasts in pitch contours than do monosyllables, since xxx
In addition to the increased number of pitch patterns that can be realised over disyllabic units, the effects of phrasal downdrift are also more apparent over the longer timing unit that is found with

\section*{A3.1.2.1 H melody}

The high melody spreads over disyllabic words

\section*{A3.1.2.2 L melody}

\section*{A3.1.2.3 LH melody}

\section*{A3.1.2.4 LHL melody}

\section*{A3.1.2.5 HL melody}

The HL melody spreads over two syllables as a sequence of one high-pitched and one lowpitched syllable. There is considerable 'merger' between the end of the high pitch and the start of the low pitch, so that an idealised 44-22 shape is frequently changed to a 43-21.

As with the other tones, phrase-initial position leads to a significant dropping of the pitch at the start of the syllable, and a perceptual rise in pitch. Acousitcally there is a very great rise in
\(\mathrm{F}_{0}\) from a very low level, but perceptually the rise is only slight. This might be due to the fact that the amplitude is very low for the early part of the rise, elading to a low perceptual salience. Both the \(\mathrm{F}_{0}\) trace and a decibel trace are shown for the same phrase-initial token of lópa.

\section*{lópa 'earlier'}



\section*{A3.1.2.6 HĽ melody}

\section*{A3.1.2.7 H̀ L melody}

\section*{A3.1.3 Trisyllables}

The number of contrasts found on trisyllabic words is no greater than those found on disyllabic words, but due to the greater distance from the beginning to the end of the word there is even more in the way of pitch perturbation.

\section*{A3.1.4 FO in phrases}

The behaviour of \(\mathrm{F}_{0}\) in phrases is an interesting study, and while a complete investigation of the effects of intonation and different tones on the \(\mathrm{F}_{0}\) of a phrase lies beyond the scope of the present work, some preliminary notes may be made.

It is noteworthy that a falling tone has a depressor effect on a following low toned syllable, giving weight to the suggestion that these syllables are in some way phonologically 'toneless', being unassociated with a H tone unit. The following two \(\mathrm{F}_{0}\) traces show two utterances of the phrase pìng te ti (e) 'they make war', and in the second one we can clearly see that the \(\mathrm{F}_{0}\) on te=, the third perosn plural verbal proclitic, shows a sharp drop.
ping te ti 'they make war'

ping te ti e 'they make war'


\section*{Appendix 4 Texts}

The following texts are presented as examples of the language in use, in contexts that are more 'natural' than some of the more obviously elicited examples and paradigms that have been shown in the earlier chapters of this book. These texts represent a range of genres, from reminiscences, traditional narratives, personal histories, descriptions of relationships or landscape, and procedural narratives explaining how to do or make things.

The texts are presented in the same three-line format that has been used with the Skou material cited in the rest of the book. The glossing conventions are the same, with the addition of some additional formatting used to impart additional information about the prosodic structure of the narrative, and to show various features that are not part of the Skou phonology. The different formatting conventions used are:
\begin{tabular}{lll} 
Lópa & italics & the default means of marking Skou material. \\
[datang] & sans serif & Non-Skou language material; Papuan Malay. \\
[indi] & IPA & \begin{tabular}{l} 
nesual phonetic features or rare allophones. \\
expected phonological material not realised
\end{tabular} \\
{\([h]\)} & bracketed italics & \begin{tabular}{c} 
phonetically.
\end{tabular} \\
\(-\{\mathrm{Ya}\}\) & curly brackets & \begin{tabular}{c} 
interjection or interruption from a second \\
party.
\end{tabular}
\end{tabular}

These different conventions, other than the default italics, are used as described in the following notes.
[Sans serif font in brackets]
An example of the first of these formatting conventions can be found in line (7) of the first text, Pìng, where we find [itu Sentani ka]. This is material spoken in Papuan Malay; \({ }^{70}\) rather than convert it to Skou after the fact it is presented as originally narrated. In some cases this material is clearly in the nature of an aside, as is the extract in line (7), where the speaker clarifies for the non-native Skou listener (me - MD) the identity of Te Húng as Sentani. In other cases such a use of a Malay equivalent is, I suspect, a form of stylistic repetition, as in line (14) of this same text, where the Skou phrase Pe ingje wò \(a\) is repeated with modification as [dong Yesus], paralleling the parallelism seen in lines (11) - (12), and elsewhere in other texts (eg., lines (11) (13) of text 14).

A third use of this Papuan Malay material can also be seen in line (14) from this same text, where we can see the use of the Malay perfective aspect marker [su]= 'already' (cognate with Standard Indonesian suda(h), and ultimately derived from this independent aspectual marker), attached to a Skou morpheme, also seen in line (13); the lack of morphosyntactic means of

\footnotetext{
70 For details of Papuan Malay, see Donohue (to appear) and the references in that article.
}
expressing certain aspectual distinctions in Skou means that the appropriate Malay terms are not infrequently used for this purpose by bilingual speakers.

This level of code-switching reveals the extent to which bilingualism is prevalent amongst Skou speakers: the narrator of this text was 73 when the text was recorded (2002), and so the amount of Malay used cannot be attributed to recent changes in education or new patterns of social interaction amongst the youth. Texts 2,3 and 4 also show quite a lot of switching into Malay on the part of the narrators. The transcription of the Papuan Malay extracts follows an orthography that adheres as closely as possible to Standard Indonesian, while still representing the distinctive features of Papuan Malay. The Malay parts of mixed Skou-Malay sentences are glossed, also in square brackets, when they are a small part of a Skou sentence or a Skou section of discourse, but are simply translated without individual morpheme glosses when the whole segment is in Malay.

Note that loans from Papuan Malay, with varying degrees of phonological assimilation, but which are part of the normal lexicon of modern Skou, have not been marked as distinct in this way: thus rabáká 'tobacco', is a Skou word, and so too is motoro 'motorboat' not listed as a Malay word, since it has been (covertly) adopted into Skou, and violates none of the phonological constraints that apply to native Skou words.
[intemational whonetic ossociation symbols]
Unusual phonetic realisations are shown in standard IPA conventions, in square brackets. An example of this can be found in line (13) of text 3 , where the phoneme sequence /tebapubi/ is realised as [tepapubi], with a rare example of lenition of a \(/ \mathrm{b} /\), and so has been transcribed as \(T e[₹]\) apúbí, with the non-predictable part of the word shown in IPA rather than orthography. Sometimes, where the identity of the 'normal' pronunciation is not obvious from the form actually produced, the IPA transcription is shown following the syllable or unit that is affected, as in wi \([\square]\), in Text 11 line 5, showing that an expected [wi] appears as [ \([0]\).

\section*{[Italics in brackets]}

Phonetic material that might be expected (on the basis of our knowledge of the phonological representation) to be present, but is not, is indicated in square brackets [ ], in italics. Examples of this can be seen in line (5) of text 13 , where the expected [ \(\mathrm{h}_{\mathrm{h}}\) ] is omitted, coded as [ \(h\) ]. In line (43) of text Tangwáto I, the bracketed, non-italicised [ h\(]\) indicates an unexpected \([\mathrm{h}]\) instead of \([\mathrm{w}]\); the phonological identity of the root can be recovered from the wordlist in Appendix 1. False starts are also included, such as line (26) of text three. Note also that predictable omissions of phonological material, such as line 17 of the first text, are simply marked with round brackets: ( ); this same bracketing notation is also used as a punctuation mark, to indicate an aside in the speaker's narration. The square bracket notation is only used for unexpected or highly unusual allophony.

\section*{- \{Sans serif font in curly brackets \}}

Interjections by someone other than the speaker (usually me) are marked in curly brackets with a dash preceding them, as in line (68) of text 24 , where I (-MD) pose a question: - \{Pa Úeròng?\} 'and the Uerong river?' The formatting inside these interruptions is sans serif, regardless of the language used. The glossing line uses the conventions, seen earlier, of bracketing with square brackets any non-Skou material.

Unusual morphosyntactic structures are noted following the translation line of the text.

Finally, following the three-line glosses for each text is an edited version of the narration, which has been 'approved of' by the person who related the text. This is thus the representation of their text that they wished to have made public in the community, thus representing some notion of prescriptive 'good style.' In these transcriptions all repetitions and many tail-head linkages are reduced, and hesitation markers are omitted. Lexically, we can see that some additional words have been added in order to increase the number of parallelisms in the texts, clearly a prescriptively 'good' thing.

One other significant point of divergence in presentation between the textual material in this appendix and the material presented in the body of the book, including material quoted from these texts, is that the linear arrangement of the texts here is by intonation breaks, with a new numbered line starting only at an intonation boundary, and every intonation boundary being indicated by a new line. While this does some injustice to narrative and syntactic (both clausal and phrasal) units, it again preserves information that would otherwise have been lost, such as the presence of afterthoughts, or pauses following topicalised constituents, and allows us to observe the interaction of tail-head linkages and intonation.

The order of the texts roughly proceeds from those that show the most amount of Malay influence to those that are the most 'pure' Skou, linguistically, though this principle has been only loosely adhered to. Following each story, some of the more salient or unusual points of grammar exemplified in the text are pointed out.

Texts
1.......... Pìng ..... 551
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3.......... Skou ..... 555
4.......... Te Óeti ..... 557
5.......... Te Jáwung ..... 560
6.......... Tangwáto ..... 561
7.......... Hòe ..... 564
8.......... Te Lóngpa táng te te ..... 568
9.......... Ang ..... 571
10........ Uepong ..... 573
11........ Pó ..... 575
12........ Móe ..... 578
13........ Móe II ..... 580
14........ Kóeng bang tue ..... 582
15........ Te Táng pìng-tè ..... 588
16........ Amerika ..... 594
17........ Te bà pílang te ti e húhú ..... 598
18........ Te Táng ..... 602
19........ Tangmoe ..... 607
20........ Tangí / Tangwà ..... 613
21........ Ke bàti ..... 620
22........ Tangwáue ..... 621
23........ Ke balèngtung ..... 623
24........ Tangwáto I ..... 624

\section*{1 Pìng}

\section*{War (37 secs)}

This short narrative describes some aspects of the relationships between various villages in the Skou area in the pre-Dutch era, which were then, as now, friendly. The only regular conflicts in the area involved the inland groups, either the Sentani and Nafri around and sound of Yotefa bay, or the Elseng immediately south of Skou Yambe. Skou participation in these conflicts was mainly second-hand, as a result of marriage ties with Tobati and Enggros, hence the brevity of this text.
(1) Lópa=ing pìng te=ti e, earlier=DEIC war 3PL=3PL.do 3PL.be
'In the olden days they used to fight wars, ...'
(2) \([y a]\),
[yes]
'indeed, ...'
(3) Hùng te=ti e.
battle 3PL=3PL.do 3PL.be 'they'd fight battles.'
(4) \(A\).
ah
'Mmm.'
(5) \(T e\),

Sk-
'Sko-, ...'
(6) Te Máwo, Skou Mabo 'Skou Mabo
(7) Te Tángpe=ing te héfèng.

Skou Yambe=DEIC 3PL good
'and Skou Yambe, we had good relations with them.'
(8) \(P a\), Te Téme,

Tobati Nafri
‘Tobati, Nafri
(9) Te Húng ([itu Sentani ka]),

Sentani [that Sentani TAG]
'Sentani,
(10) Te Húng,

Sentani
'Sentani
(11) Te Téme,

Nafri
'Nafri
(12) Te Lóngpa,

Enggros
'Enggros, ...'
(13) pìng-pìng nawò te=ti.
war-RED many 3 PL=3PL.
'they fought many wars.'
(14) Pìng te=ti=ko,
war 3 PL=3PL.do=OBV
'They'd make war, ...'
(15) ung \(a\),
now
'but now, ...'
(16) ung a [su=]ka.
now [already=]NEG
'but now no more.'
(17) \(\quad P e=i ̀ n g j e=w(\grave{o})=a\)
[datang, dong Yesus datang sut-]=ka,
3SG.F=gospel=EMPH=PROM [come mob Jesus come already NE-]=NEG
'The gospel, the Christians have come and they don't do it any more, ...'
(Pe=ingje is a loan from Indonesian injil 'gospel' with a feminine proclitic added to it. t- is a false start on Malay tidak 'not')
(18) ung a [suda habi],
now [already finish]
'now that's over, ...'
(19) [suda aman].
[already safe]
'It's safe now.'
(20) Ung a héfèng.
now good
'now it's all right.'
(i) Lópa pìng te ti e, Hùng te ti e. Te Máwo, Te Tángpe ing te héfèng. Pa, Te Téme, Te Húng, Te Lóngpa, pìng pìng nawò te ti. Pìng te ti ko, ung a, ung a ka. Pe ìngje wò toe, ka, ung a ka. Ung a héfèng.

The sorts of extensive parallelisms that are part and parcel of Skou narration are clear even in this short account. Lines (1) and (3), lines (13) and (14), and lines (18) - (20) all show clear parallelisms. Lines (6) - (7) and (8) - (13) show the use of the non-overt conjunction of NPs.

\section*{2 \\ Te Húele}

Sangke / Nikra (30 secs +28 secs)
In this brief narrative the 'Nikra', a generic name for inland groups practising sorcery, here associated with the 'Sangke' (see 1.2), are described and their practice of sorcery is explained. About half-way through the speaker shifts to Malay, and repeats the text in that language.
[Jadi],
[well]
'Well, ...'
(2) \(T e=b a ̀ ~ H u ́ e l e, ~\)

3PL=person Sangke
'The Sangkes, ...'
(3) [Nikra itu] Húele,
[Nikra that] Sangke
'Nikra is Sangke, ...'
(4) Húele te=a pìng te=ti e,

Sangke 3PL=PROM war 3PL=3PL.do 3PL.be
'Sangke's would make war, you know, ...'
(5) \(t e=b a ̀ \quad t e=j i ́ \quad e\).

3PL=person 3PL=3PL.hit.PL 3PL.be
'they'd kill people.'
(6) Lópa te=ko,
earlier 3PL=OBV
'This is what they used to do, ...'
(7) ung \(a=w e=i n g \quad k a\),
now=this=DEIC NEG
'now they don't, ...'
(8) ung \(a=w e=i n g \quad n i=r a=l u e ~ k a\).
now=this=DEIC \(1 \mathrm{SG}=\) also=know NEG
'now I don't know about this going on.'
\(\begin{array}{llllll}\text { (9) } & \text { Pìng } & t e=t i & e & t i & n a \\ \text { war } & \text { 3PL=3PL.do } & e & \text { 3PL.be } & \text { 3PL.do } & \text { or } 3 \text { 3PL=3PL.do }\end{array} \quad\) NEG
na \(n \grave{i}=r a=l u e \quad k a\).
or \(1 \mathrm{SG}=\) also=know NEG
'They'd wage a war, or not, I don't know.'
(10) Ung ka.
now NEG
'Not now.'
(11) Lópa=ing te=toe,
earlier=DEIC 3PL=3.come
'They used to come, ...'
(12) rabáká ne=ti=ko,
tobacco \(1 \mathrm{PL}=\mathrm{do}=\mathrm{OBV}\)
'and we'd smoke some tobacco (butts), ...'
(13)
rí ne=witàfi te,
tree 1PL=leave 3SG.F.go
'and leave the butts, ...'
(14)
\begin{tabular}{lllll} 
rabáká & \(t e=w i ́=k o\) & te & já \(\quad t e=t i=k o\) \\
tobacco & 3PL=get.F=OBV & 3PL & potion \(3 \mathrm{PL}=3 \mathrm{PL} . \mathrm{do}=\mathrm{OBV}\)
\end{tabular}
\(n e=\) wung-wung \(t e\).
1PL=die-RED 3SG.F.go
'they'd take the tobacco and make magic from it, and we'd die.'
(15) Jadi,
'So, ...'
dorang itu,
'that mob, ...'
mama dulu itu,
'when I was young, ...'
kurang biasa perang,
'they weren't used to waging real wars, ...'
tapi dong prang itu yang diam-diam.
'but they'd fight in secret.'
Kita dudu sama-sama,
'We'd sit together, ...'
trus,
'and then, ...'
dong kasi ro- ambe rokok ka - ampas roko,
'they'd give some, they'd take the tobacco, take the butts of our cigarettes, ...’
atau ampas roko ka,
'or the butts of cigarettes, ...'
ampas pinã ka,
'or the discards of betelnut (we'd chewn), ...'
ampas-ampas yang kitong buang,
'the rubbish that we'd throw away, ...'
garam,
'or salt, ...'
suda lentoo begitu,
'something that had been thrown away like that, ...'
è,
'well, ...'
Musti mati.
'then we were bound to die.'
(ii) Te bà Húele, pìng te ti e ti a, te bà te jí e. Lópa te ko, ung a we ing ka, ung a we ing nì ra lue ka. Pìng te ti e ti na te ti ka na nì ra lue ka. Lópa ing te toe, rabáká ne te ko, ríne witàfi te, rabáká te wí ko te já te ti ko, ne wung wung te.

The un-acknowledged tense/aspect involving just the verb 'be' following the main verb makes an appearance in this text, in line 5.

\section*{3 Skou}

Skou ( \(\pm 30\) secs \()\)

The relationships between the three Skou villages are described in this short narrative. There is quite a lot of shifting into Malay in this text, and at the half-way point it looks like the speaker is going to switch over to finish the text in Malay, but then shifts back to Skou for the conclusion.
(1) Te Máwo [dジ] Te Bapúbí,

Skou Mabo [with] Skou Sai
'Skou Mabo and Skou Sai, ...'
(2) Te Máwo=pa Te Bapúbí,

Skou Mabo=INSTR Skou Sai
'Skou Mabo and Skou Sai, ...'
(3) te héfèng.

3PL good
'they get on well.'
(4) \(T e \quad y a-n \grave{o}=p a \quad t e=t i=p a \quad t e=t=a n g \quad e \quad t i\).

3PL thing-work=INSTR 3PL=3PL.do=INSTR 3PL=3PL-eat 3PL.be 3PL.do
'They do work, and they eat (together).'
(5) [Itu berarti kitorang baku kasi. Ya, begitu. Jadi tidak berkelahi]. [that now we reciprocal give yes like.that so not like.that fight]
'So then we'd exchange gifts. Like that. So we didn't fight amongst ourselves.'
(5) Pìng,
war
'War, ...'
(6) \(t e=t i \quad k a\).

3PL=3PL.do NEG
'they didn't used to fight.'
(7) Te ya-no héfèng te=ti=pa te=t-ang.

3PL thing-work good 3PL=3PL.do=INSTR 3PL=3PL-eat 'They'd work well, and eat (together).'

Ya lóló te=wí=ko,
thing discarded \(3 \mathrm{PL}=\) get. \(\mathrm{F}=\mathrm{OBV}\)
'They'd take our rubbish, ...'
(9) \(\begin{array}{ll}y a ́ & t e=t i=k o \\ \text { medicine } & \text { 3PL=3PL.do=OBV } \begin{array}{l}\text { ne=wung-wung } \\ \text { 1PL=die-RED }\end{array} \quad \text { te, } \\ \text { 3SG.F.go }\end{array}\)
'They'd make medicine, and then we'd die.'
(10) yá-mo=ing.
medicine-potion=the
'Potions.'
(11) Te Bapúbí, [dong biasa begitu, dong biasa, tidak taw dong pu bahasa itu,]

Skou Sai [they normal like.that they normal not know they POSS language that [mungkin ada satu yang luka...]
[maybe exist one REL wound]
'Skou Sai, they're normally like that, they usually, I don't understand their language, maybe they've got something wrong, or , ...'
(12) Te Bapúbí,

Skou Sai
'The Skou Sais, ...’
(13) \(T e=\operatorname{ing} a\),
\(3 \mathrm{PL}=\) =the
'that lot, ...'
(14) \(y a\),
thing
'so, ...'
(15) Te[₹]apúbí te bà pí-na ka,

Skou Sai 3PL person speech-meat NEG
'The Skou Sais, they're not very talkative people, ...'
(16) [dong sudah tidak ada],
[they already not be]
'they're really not very, ...'
(17) [apa],
[what]
'what, ...'
(18) [bia senang ka atau apa],
[leave happy Q or what]
'are they happy or what, ...'
(19) [dong orang gigit ka],
[they person bite Q ]
'has someone annoyed them? ...'
(20) [jadi dong lia orang itu],
[because they see person that]
'so they look like that sort of person, ...'
(21) [tidak senang itu].
[not happy that]
'not happy, like that.'
(22) [Tapi kalo],
[but if]
'But if, ...'
(23) Te Má-,

Skou Ma-
'Ma- ...'
(24) Te Máwo [datang ke Skou Sai], Skou Mabo [come to Skou Sai] 'Mabos come to Skou Sai, ...'
(25) Te Tángpe [latang ke Skou Sai],

Skou Yambe [come to Skou Sai] 'if Yambes come to Skou Sai, ...'
(26) [dong=terima deng bai].
[they=receive ADV good]
'they welcome us nicely, ...'
(27) [Dong=terima macam bai]. [they=receive sort good] 'they welcome us well.'
(28) \([\varepsilon] n e\),

1PL
'And us, ...'
(29) Ne=mat- \([\varepsilon]\) Máwo,

1PL=Mad- Skou Mabo
'we Mad- uh Mabos, ...'
(30) Te Tángpe,

Skou Yambe
'to Skou Yambe, ...'
```

ne=ne ne ti ke=ing yano húehúefa
1PL=1PL.go 1PL.be 1PL.do 3SG.NF=DEIC thing carefully
te=ti e ti.
3PL=3PL.do 3PL.be 3PL.do
'We'd go there and they'd do things properly.'

```

mmm
'Mmm.'
(iii) Te Máwo pa Te Bapúbí, te héfèng. Te yanò pa te ti pa te tang e ti. Pìng, te ti ka. Te ya-no héfèng te ti pa te tang. Ya lóló te wí ko, yá te ti ko ne wung-wung te, yá-mo ing. Te Bapúbí te bà pína ka. Ne Máwo, Te Tángpe, ne ne ne ti ke ing yano húehúefa te ti e ti.

\section*{4 Te Óeti}

Wutung (1 min. 9 secs)

Wutung is the village in which another Skou-family language is spoken, and which has the closest social ties to the Skou villages. This text records a Skou speaker's perspective on this relationship, with little libel.
(1) Te Máwo \(p i ́=a \quad n i ̀=w u\),

Skou Mabo story=PROM 1SG=narrate
'I'm telling a story about Skou Mabo, ...'
(2) Te Óeti,

Wutung
'and Wutung, ...'
(3) \(t e=r-i \quad e \quad t i\),

3PL=3PL-PL.get.PL 3PL.be 3PL.do
'They'd do it, ...'
(4) \(t e=t i \quad e \quad t i\),

3PL=3PL.do 3PL.be 3PL.do
'they'd get on to it, ...'
\begin{tabular}{|c|c|c|c|c|c|}
\hline ne=Máwo & & & \multicolumn{2}{|l|}{Te Óeti pí-tè} & \(n e=t i\) \\
\hline 1PL=Skou & Mabo & \(1 \mathrm{PL}=\) also & Wutung & language-3PL.GEN & \(1 \mathrm{PL}=1 \mathrm{PL}\). do \\
\hline ne & \(t i\). & & & & \\
\hline 1PL.be & 1PL.do & & & & \\
\hline 'we Mab & os too & can underst & and the W & Wutung language, ...' & \\
\hline
\end{tabular}
(6) \(N e=r\)-ue ne te-ti.

1PL=1PL-hear 1PL.be 1PL.do-RED
'We can understand it.'
(7) Ing \(a\),
the
'Because, ...'
(8) \(n e\),

1 PL
'us, ...'
(9) pe=ueme bà -

3SG.F=woman person
'a woman would (marry) someone, ...'
(10) pe=Máwo te=ueтe pe te=úepong

3SG.F=Skou Mabo 3PL=woman 3SG.F 3PL=marriage pe=toe-toe Te Óeti yahénglong te=fu-fu. 3SG.F=3SG.F.come-RED Wutung brideprice 3PL=put.down-RED 'Skou Mabo women, they'd marry the woman and she'd come home with them, and Wutung would pay the brideprice.'
(the sequence \(p e=\) Máwo, te=ueme, and pe is a set of appositional phrases steadily narrowing the semantic scope of the NP)
(11) Yahénglong,
brideprice
'A brideprice, ...'
(12) [mas kawin].
[brideprice]
'the brideprice, ...'
(13) Yahénglong te=fu e ti-ti.
brideprice 3PL=put.down 3PL.be 3PL.do-RED
'they'd pay a good brideprice.'
(14) \(Y a \quad\) ung \(a=w e=[n i]\),
so now=this=[this]
'So these days, ...'
(15) Te Máwo=pa Te Óeti=pa ne=[suda jadi satu].

Skou Mabo=INSTR Wutung=INSTR 1 PL=[already become one \(]\)
'Skou Mabo and Wutung, we're one and the same.'
(16) Lò̀ng ne=n-a ne ti,
road 1PL=1PL-walk 1PL.be 1PL.do
'We walk together, ...'
(17) \(y a\) ne ne ti.
thing 1 PL=1PL-walk 1PL.be 1PL.do
'we do things together.'
(18) Te Jáwung \(=\) ing \(=k a\).

Nyao=DEIC=FOC
'And then there's Nyao.'
(19) Jáwung=ing \(a\),

Nyao=the
'Nyao, ...'
(20) ne=meng wówó moeng ti,

1PL=PL.sit uncle sit 1PL.go
'we lived (there), my uncle went there (first), ...'
(21) \(=p a \quad n e=n e \quad t i-t i\).
\(=\) INSTR 1PL=1PL.go 1PL.do-RED
'and then we all went.'
(22) Sa pergi, barubaru sapunya ana pergi. A Nyao itu logat itu ya baha'a Skou lae, Abe. Dong kerja yadi tinggal deng saya di situ. Jadi sapunya nenek pigi dong terima yengan bai. Tru dong kasi barang-barang banyak debawa pulang. Dong kenal deng saya.
'I went, just recently my daughter's gone there. Um, Nyao, their accent, it's Skou too isn't it. Oh, Abepura. They (come and) work (there), and they stay with me there. So my grandmother went there, and they accepted her friendlily. Then they gave her lots of presents, and she took them home. They know me.'
\begin{tabular}{llll} 
Te=Jáwung & te=bà & héfèng & ung \(a\). \\
3PL=Nyao & 3PL=person & good & now
\end{tabular}
'Nyao's are nice people now.'
(24) Te bà hénglong [kalo],

3PL=person wealth [if]
'They're rich people, if, ...'
 3PL=child-1PL.GEN=1PL.DAT 3PL=3PL.go Nyao 'our children go to Nyao, ...'
(26) Yano héfèng te=ti.
thing good 3PL=3PL.do 'they treat them well.'
(27) [Dong biking deng bae, dong bae]. [they do ADV good they good]
'They treat them well, they're good (people).'
(28) Te=Jáwung ya nawò te=r-i nì, 3PL=Nyao thing many 3PL=3PL-PL.get.PL 1SG 'Those Nyaos got many things for me, ...'
(29) te=angku-nì=ne.

3PL=child-1SG.GEN=1SG.DAT
'for my children.'
(iv) Te Máwo pí a nì wu, Te Óeti, te ri e ti, te ti e ti, ne Máwo ne ra Te Óeti pítè ne ti ne ti. Ne rue ne teti. Ing a, ne, pe ueme bà pe Máwo te ueme pe te úepong pe toetoe Te Óeti yahénglong te fufu. Yahénglong te fu e titi. Ya ung a we, Te Máwo pa Te Óeti pa ne áling. Lòeng ne na ne ti, ya ne na ne ti. Te Jáwung ing ka. Jáwung ing a, ne meng wówó moeng ti, pa ne ne titi. Te Jáwung te bà héfèng ung a. Te bà hénglong kalo, te angku nè ne te te Te Jáwung. Yano héfèng te ti. Te Jáwung ya nawò te ri nì, te angkunì ne.

\section*{5 Te Jáwung}

Nyao (45 secs)
A short autobiographical account of Skou's relationship with the Nyao people.
(1) \(N i ̀ h a p a ~ k e t o n g ~ S k o u l a ~ n i ̀=l i=p a, ~\)

1 SG small when school \(1 \mathrm{SG}=\mathrm{do}=\mathrm{INSTR}\)
'When I was young and was still at school, ...'
(2) \(n \grave{l}=r e\),
\(1 \mathrm{SG}=\mathrm{go}\)
'I went, ...'
(3) Te Jáwung bàme.

Nyao village
'to Nyao.'
(4) Ana,
like
'It was like this, ...'
(5) kóko kurù,

FyB teacher
'my uncle was a teacher (there), so ...'
(6) ne=ti ne Te Jáwung,

1PL=1PL.go 1PL.be Nyao
'we went to stay in Nyao.'
(7) \(n e=n e\).
\(1 \mathrm{PL}=1\) PL.go
'we went.'
(8) Tangwáue ku ne=kúe ne hángpeng.
bush.turkey egg 1PL=dig 1PL.be bush
'We'd dig up bush turkey eggs in the bush,...'
(9) Tangwáue \(k u\),
bush.turkey egg
'bush turkey eggs, ...'
(10) \(n e=t e=k o \quad n e=k u ́ e=k o \quad\) kúe \(=k o\),
\(1 \mathrm{PL}=1 \mathrm{PL} . \mathrm{go}=\mathrm{OBV} \quad 1 \mathrm{PL}=\mathrm{dig}=\mathrm{OBV}\) dig=OBV
'we'd go and dig them, dig them up, and, ...'
(11) \(k u=i n g \quad m o n g=i n g\),
egg=DEIC sit.F=DEIC
'those eggs, there they were, ...'
(12) \(a \quad k u \quad k-a=k o \quad n e=r-o e \quad e\).
uh egg 1SG-carry=OBV 1PL=1PL-get.PL 3SG.F.be
'well, I'd take those eggs, we'd collect them all.'
(13) \(N e=r\)-oe na moe,

1PL=1PL-get.PL or return
'We'd collect them and go back home, ...'
(14) \(A\).
ah
'Yes.'
(15) \(N e=r\)-oe na moe ne=ko ne Te Jáwung=pa,

1PL=1PL-get.PL or return 1PL.go=OBV 1PL.go Nyao=INSTR
'We got them all and then went back to, went to Nyao, ...'
(16) \(n \grave{\imath}=l i=i n g ~ a=k o, \quad\left[\begin{array}{lll}45 & 55 & 32 \\ 21\end{array}\right]\)
\(1 \mathrm{SG}=\mathrm{do}=\) the \(=\mathrm{OBV}\)
'I did this, and then, ...'
(17) kóko nì \(\left[\hbar_{1}\right] e=k a=k o \quad\) \(k e=t i \quad\) Máwo.

FyB 1SG 3SG.NF=carry=OBV 3SG.NF=3SG.NF.go Skou Mabo
'my uncle took me back to Skou Mabo.'
(18) Mmm .
mmm
'(Indeed.)'
(v) Nì hapa ke tong Skoula nì li pa, nì re, Te Jáwung bàme. Kóko kurù, ne ti ne Te Jáwung, ne ne. Tangwáue ku ne kúe ne hángpeng. Tangwáue ku, ne te ko ne kúe
ko kúe ko, ku ing mong ing, a ku ka ko ne roe e. Ne roe na moe, Ne roe na moe ne ko ne Te Jáwung pa, nì li ing a ko, kóko nì ke ka ko ke ti Te Máwo.

\section*{6 Tangwáto}

\section*{Tangwato}

This narration is a description of the land ownership along the coastline between Cape Juar , which marks the western edge of Skou lands, and the Tami river, which is the eastern boundary of Skou territory. The Malay conclusion to the text is really a repeat of the information in Malay, added to make sure I understood the speaker properly, as the content of this text is culturally very important.
(1) Húhú ne=ti ne ti. story 1PL=1PL.do 1PL.be 1PL.do 'We're telling a story.'
(2) Àpi,
story
'A story, ...'
(3) àpi ne=t-ang.
story 1PL=1PL-perform
'We're telling a tale.'
(4) Báng,
beach
'The beach, ...'
(5) Tangwáto báng=ing,

Tangwato beach=DEIC
'the beach at Tangwato, ...'
(6) \(w-a \quad\) Tangwáto pong=ing \(a=k o\),

3SG.F-walk Tangwato cape=the \(=\) OBV
from the cape at Tangwato, ...'
(7) te \(w-a=k o\) Te Tángpe bàme.

3SG.F-walk=OBV 3SG.F.go Skou Yambe village
'up to Skou Yambe village.'
(8) Báng=ing ke=ing Te Tángpe báng-tè.
beach=DEIC 3SG.NF=DEIC Skou Yambe beach-3PL.GEN
'That beach is Skou Yambe's beach.'
(9) \(W-a \quad\) Te Tángpe,

3SG.F-walk Skou Yambe
'From Skou Yambe, ...'
(10) bàme=ing,
village=DEIC
'the village, ...'
(11) \(w-a=k o\) te Te Máwo bàme,

3SG.F-walk=OBV 3SG.F.go Skou Mabo village 'up to Skou Mabo village, ...'
(12) \(w-a=k o\) te Te Máwo bàme, 3SG.F-walk=OBV 3SG.F.go Skou Mabo village 'up to Skou Mabo village, ...'
(13) \([\mathrm{a}]\),
yep
'yes, ...'
(14) \(k(e)=i n g\) Te Máwo pa- báng -, 3SG.NF=DEIC Skou Mabo water beach 'that's Skou Mabo's coast - beach - ...'
(15) te=a hángto,

3PL=PROM sand
'their sand, ...
(16) \(e\),
ah
'ah, ...'
(17) báng-tè.
beach-3PL.GEN
'their beach.'
(18) \(W-a=k o \quad t e\),

3SG.F-walk=OBV 3SG.F.go
'From there, going to, ...'
(19) Te Bapúbí,

Skou Sai
'Skou Sai, ...'
(20) \(k e=l o-k o \quad t e=t o e\),

3SG.NF=east 3PL=3.come
'coming from the east, ...'
(21) Nàho=ing \(a\), [nahopiè̈ت]

Naho=the
'that's where Naho (beach), ...'
(22) \(e \quad l i\).
be do
is.'
Nàho Te Máwo-tè ke=ing Te Máwo
Naho 3SG.F-walk-APPL Skou Mabo-3PL.GEN 3SG.NF=DEIC Skou Mabo hángto-tè, sand-3PL.GEN
'From Naho to Skou Mabo that's Skou Mabo's sands, ...'
(24)
[eit w-a báng-tè,
3SG.F-walk beach-3PL.GEN
'and from their beach, ...'
(25) \(W-a[\mathrm{r}]\),

3SG.F-walk:
'up to, ...'
(26) Léli=pa \(w\)-a=ko te Te Bapúbí

Leli=INSTR 3SG.F-walk=OBV 3SG.F.go Skou Sai
Leli beach, and up to Skou Sai, ...'
(27) \(k e=i n g ~ T e ~ B a p u ́ b i ́ ~ b a ́ n g-t e ̀ . ~ . ~\)

3SG.NF=DEIC Skou Sai beach-3PL.GEN
'that's Skou Sai's beach.'
(28) \(W-a\) Te Bapúbí pe=w-a=ko te Paílong,

3SG.F-walk Skou Sai 3SG.F=3SG.F-walk=OBV 3SG.F.go Tami River
'And from Skou Sai to the Tami River, ...'
(29) \(K e=i n g ~ T e ~ B a p u ́ b i ́ ~ b a ́ n g-t e ̀ . ~ . ~\)

3SG.NF=DEIC Skou Sai beach-3PL.GEN
'that's Skou Sai's beach.'
(30) [Jadi deng bahasa Indonesia?]
'So (now) in Indonesian?'
(31) - \{Ya, dengan bahasa Indonesia. \(\}\)
'Yes, in Indonesian.'
(32) Dari Tangjung Tangwáto sampe di, Skou Yambe, pante itu te Laya punya. Dari Skou Yambe kampung itu [ \(w-a=k\) ] - sampe di Skou Mabo, itu Skou Ma[m]bo punya. Dari Skou Mabo sampe di tenga-tenga pante, Nàho, Léli, itu Skou Mabo punya. [ \(W-a=\) ]d nàho, e sampe di, dari Nàho sampe di, Tàmi, itu Skou Sai punya. 'From Tangwato to, uh, Skou Yambe, that beach is Laya's. From the village at Skou Yambe to, to Skou Mabo, that's Skou Mabo's. From Skou Mabo to half-way along the beach, Naho, Leli, that's Skou Mabo's. And from Naho up to the Tami River, that's Skou Sai's.'
(We can see that here some Skou creeps into the speaker's Indonesian rendition of the story)
(vi) Húhú ne ti ne ti. Àpi ne tang. Tangwáto báng ing, wa Tangwáto pong ing a ko, wa ko te Te Tángpe bàme. Báng ing ke ing Te Tángpe báng tè. Wa Te Tángpe, wa ko te Te Máwo bàme, ke ing Te Máwo báng tè. Wa ko te, Te Bapúbí, ke loko te toe, Nàho ing a e li. Nàho wa na Te Máwo tè ke ing Te Máwo hángto tè, wa báng tè, Léli pa wa ko te Te Bapúbí ke ing Te Bapúbí báng tè. Wa Te Bapúbí pe wa ko te Paílong, Ke ing Te Bapúbí báng tè.

7 Hòe

Sago (1 min. 25 secs)
Sago forms the staple of the Skou diet, along with (according to popular prescription) fish and coconut (various fruits and vegetables are also regularly eaten, but part of the self-definition of
being Skou is the myth of subsisting on sago, fish and coconuts). This text describes the main events that constitute its processing and consumption. The string of serious repetition in (8) (16) should not be thought if as stylistic, but is rather the narrator groping for the exact words that she wants.
(1) Hòe te=.
sago 3PL=
'Sago, ...'
(2) Hòe, te=j-á te húhú ne=ti-ti ti. sago 3PL=3PL-pound 3SG.F.go story 1PL=1PL.do-RED 1PL.do 'Sago, we'll tell a story about them pounding it.'
(3) Ke=ba-léng tena è-ke, 3SG.NF=person-male 3DU/GDR wife-3SG.NF.DAT 'A man and his wife, ...'
(4) rangwaue te=wí,
axe 3 PL=get.F
'they get the axe, ...'
(5) te hòe te=j-á te hí, 3PL sago 3PL=3PL-pound 3SG.F.go go.down 'they're pounding sago so it goes down (to the catcher), ...'
(6) tenake=te hòe-pa, 3DU=3PL.go sago-water 'the two of them go to the sago swamps, ...'
(7) te=te hòe-pa,

3PL=3PL.go sago-water
'they go to the sago swamps, ...'
(8) hòe \([\varepsilon] \quad t e=f u=k o\),
sago 3PL=see. \(\mathrm{F}=\mathrm{OBV}\)
'they see the sago, and, ...'
(9) hòe,
sago
'the sago, ...'
(10) hòe,
sago
'sago, ...'
(11) hòe,
sago
'sago, ...'
(12) hòe ùe,
sago old
'the old sago, ...'
(13) hòe \(d\)-,
sago fl
'the sago fl ...'
(14) \(n a=w i ́\),
flesh=this
'this flesh, ...'
(15) hòe \(=\) ing \(a\),
sago=the
'the sago, ...'
(16) hòe=ing tóe=ing te=ti,
sago=DEIC tree=DEIC 3PL=3PL.do
'the sago, the tree, they do it, ...'
(17) \(k e=b a ̀-l e n g ~ k e=l e ́ ~ r a n g w a u e=p a \quad k e=l e ́=p a\),

3SG.NF=person-male 3SG.NF=fell axe=INSTR 3SG.NF=fell=INSTR
'the man chops it down, he chops it down with an axe, ...'
(18) pi te kong=pa.
fall 3SG.F.go down=INSTR
'it falls down.'
(19) Hóe-fì \(k e=k e ́=p a\),
sago-covering 3 SG. \(\mathrm{NF}=\) get \(=\mathrm{INSTR}\)
'He takes off the sago covering, ...'
(20) fòe \(k e=w i ́=k o\),
sago.pounder 3SG.NF=get.F=OBV
'he gets the sago pounder, ...'
(21) hòe=ing ke=ká.
sago=DEIC 3SG.NF=pound
'and pounds the sago.'
(22) \(A\).
yep
'Yes.'
(23) Pe=ueme pe hòe nà-na pe=tue,

3SG.F=woman 3SG.F sago processing.place-RED 3SG.F=3SG.F.do
'The woman prepares the place for processing the sago, ...'
(24) lí pe=wífá tí,
sago.trough 3SG.F=leave
'she leaves the trough (there), ...'
(25) \(\left[\begin{array}{ll}\text { a }]\end{array}\right.\).
yep
'yes.'
(26) Rahé pe=w-á,
coconut.strainer 3SG.F=3SG.F-pound
'She beats a coconut strainer, ...'
(27) pa- hòe-i- hòe-p,
water- sago-? sago-p
'(and she puts) water -uh-sago, sago \(\mathrm{p}-, \ldots\).
(28) Hòe-i-yong pe=hí=ko pu te
sago-?-pith 3SG.F=go.down=OBV 3SG.F.carry 3SG.F.go
\(p e=w-a ́\).
3SG.F=3SG.F-hit
'She puts the sago pith down and squeezes it.'
(the word yong means pith, but referring to sago pitch hòeiyong, rather than hòeyong, is used. No etymology can at this stage be proposed for \(i\) )
(29) \(P e=w-a ́=k o\),

3SG.F=3SG.F-pound=OBV
'She squeezes it, ...'
(30) hòe-re hí ti,
sago-milk go.down 3SG.NF.go
'the sago milk runs off, ...'
(31) \(i \quad\) líto \(=p a\),

LOC sago.trough-inside=INSTR
'into the sago trough, ...'
(32) nàli,
flesh
'the flesh, ...'
(33) hòe-nali,
sago-flesh
'the sago flesh, ...'
(34) \(a \quad p e=k u ́ e=k o\),
ah \(3 \mathrm{SG} . \mathrm{F}=\mathrm{dig}=\mathrm{OBV}\)
'uh, she scoops it out, ...'
(35) ráng-leng hòe \(p e=w-a ́=k o\)
sun-afternoon sago 3 SG.F=3SG.F-pound=OBV
\(p e=w-a ́ \quad\) loeng \(=p a\),
3SG.F=3SG.F-pound finish=INSTR
'and in the afternoon she pounds it, she pounds it until it's all done, ...'
(36) ráng-leng \(=i n g=p a\),
sun-afternoon=DEIC=INSTR
'in the afternoon, ...'
(hòe) \(p e=w\)-á=ko ráng-leng=ing \(=p a\),
sago 3 SG.F=3SG.F-pound=OBV SUN-afternoon=DEIC=INSTR
'she pounds the sago until it's afternoon, and then, ...'
(38) (hòe-na=ing) \(p e=h i ́\),
sago-flesh=DEIC 3SG.F=go.down
'the sago flesh collects at the bottom, ...'
\(p e=k u ́ e=k o \quad p e=h i ́ \quad n a ̀\),
3SG.F=dig=OBV 3SG.F=go.down sago.package
'she digs it and puts the sago down into a package, ...'
\(\begin{array}{llllll}\text { (40) } & \begin{array}{lll}a & \text { tenake }=w e & t e=r-e \\ \text { um } & \text { 3DU=this } & \text { 3PL=3PL-get } \\ & \text { carry.PL } & \text { 3PL.return }\end{array} & \text { toe } \\ & \text { 3.come }\end{array}\) bàme.
village
'and, um, we collect it all, and go back to the village.'
(41) Hòe te=me toe bàme,
sago 3PL=PL.return 3.come village
'They (take) the sago back to the village, ...'
(42) pa pe=wí-wí hí e ti, water 3SG.F=get.F-RED go.down 3PL.be 3PL.do 'She gets water, and pours it all in, ...'
(43) \(p a \quad\) lí-lí=pa, water boil-RED=INSTR 'the water boils, ...'
(44) \(\grave{e}=k o-k o \quad l i=p a\),
cook=OBV-RED do=INSTR
'and it cooks, and does that, ...'
(45) hòe pe=tue,
sago 3SG.F=3SG.F.do
'and she stirs the sago, ...'
(46) hòe pe=tue lang,
sago 3SG.F=3SG.F.do pot
'she stirs the sago in a pot, ...'
(47) (pe) hòe=pa,

3SG.F sago=INSTR
'and (she gets) the sago, ...'
(48) páng-pe \(=i n g=p a\),
husband-3SG.F.DAT=DEIC=INSTR
'and with her husband, ...'
(49) te=angku hìngtung=pa te=t-ang hòe te=t-ang=ko=ra k-, 3PL=child two \(=\) INSTR 3 PL=3PL-eat sago 3 PL=3PL-eat \(=O B V=\) also NEG 'and the two children, they all eat the sago, eat it till it's all fini-, ...'
(50) \(k a\).

NEG
'all gone.'
(vii) Hòe te já te húhú ne ti ti ti. Ke bàleng tena è ke, rangwaue te wí, te hòe te já te hí, tenake te hòe pa, te te hòe pa, hòe te fu ko, hòe na wí, hòe ing tóe ing te ti, ke bàleng ke lé rangwaue pa ke lé pa, pi te kong. Hóefi ke ké pa, fòe ke wí ko, hòe ing ke ká. Pe ueme pe hòe nàna pe tue, lí pe wífá tí. Rahé pe wá, pa hòeiyong pe hí ko pu te pe wá. Pe wá ko, hòere hí ti, i líto pa, hòenali, a pe kúe ko, rángleng hòe pe wá ko. Pe wá loeng pa, rángleng ing pa, hòe pe wá ko rángleng ing pa, hòena ing pe hí, pe kúe ko pe hí nà, a tenake we te re tu me toe bàme. Hòe te me toe bàme, pa pe wí wí hí e ti, pa lí lí pa, è ko ko li pa, hòe pe tue, hòe pe tue lang, pe hòe pa, páng pe ing pa, te angku hìngtung pa te tang hòe te tang ko ra ka.

\section*{8 Te Lóngpa táng te te}

Enggros nets (1 min. 23 secs)
There is a kind of net that is the cultural property of the inhabitants of Tobati and Enggros, in Yotefa Bay, and which is greatly admired by other peoples who trade with that ethnic group. This text, narrated by a Skou woman who married into Enggros, describes that tradition of net weaving, and its loss in the modern world.
(1) Húhú,
story
'A story, ...'
\[
\begin{array}{lll}
\text { te=Lóngpa pa } \quad \text { te=Pa } & \text { húhú-te. }  \tag{2}\\
\text { 3PL=Enggros and } \quad \text { 3PL=Tobati } & \text { story-3PL.GEN } \\
\text { 'a story of Enggros and Tobati.' } &
\end{array}
\]
(3) Táng te=ti e ti te
k.o.net 3PL=3PL.do 3PL.be 3PL.do 3SG.F.go
húhú-pè=pe nì=li-li li.
story-3SG.F.GEN=3SG.F.DAT 1SG=do-RED do
'I'm going to tell a story about the way they make the táng nets.'
(4) \(\left[\begin{array}{c}\mathrm{x}] \\ ]\end{array}\right.\)
well
'Well, ...'
(5) lang,
net
'nets, ...'
(6) lang hangling-pè \(=p e\),
net air.roots-3SG.F.GEN=3SG.F.DAT
'nets made from air roots, ...'
(7) lang hangling-pe -pè=pe=ing a,
net air.roots-3SG.F.DAT -3SG.F.GEN=3SG.F.DAT=the
'the nets made the - from air roots, ...'
(8) \(k e=b a ̀-h u e\),

3SG.NF=person-old
'the old people, ...'
(9) te=te te=j-áng-jàng=pa.

3PL-3PL.go 3PL=3PL-chop.F-RED=INSTR
'they go and cut them (the air roots),'
(10) \(T e=j-a ̀ n g=k o\),

3PL=3PL-chop.F=OBV
'They chop them and then ...'
(11) te=r-írí=pa te=r-e tu me toe, 3PL=3PL-get.PL-RED=INSTR 3PL=3PL-get carry.PL 3PL.return 3.come 'they get them and they bring them home, ...'
\(t e=r-i ́ \quad h i ́-h i ́ \quad t i ́\),
3PL=3PL-PL.get.PL go.down-RED salty.water
'they put them down in the salty water, ...'
(13) [dong]= te=r-e mong tí=ing \(a=k o \quad\) rong-rong=pa,
[they] 3PL=3PL-get sit.F salty.water=the=OBV long-RED=INSTR
'they leave it in the salty water for a long time,'
(dong is the Papua Malay 3PL pronoun, used here by the bilingual speaker)
(14) [匹],
ah
'um, ...'
(15) hangling-pè \(=p e=i n g a\).
air.roots-3SG.F.GEN=3SG.F.DAT=the
'these air roots.'
(16) Hangling wíng,
air.roots k.o.rope
'the rope you can make from these roots, ...'
(17) \(T e=r-i ́=k o\),
\(3 \mathrm{PL}=3 \mathrm{PL}-\mathrm{get} . \mathrm{PL}=\mathrm{OBV}\)
'they get them and then, ...'
(18) [jaring],
[net]
'nets, ...'
(jaring is Indonesian for 'net', used here by the bilingual speaker)
(19) táng,
k.o.net
'táng nets, ...'
(20) táng te=ti-ti.
k.o.net 3PL=3PL.do-RED
'they make táng nets.'
(21) Táng=ing te \(=t i=k o=r a\),
k.o.net=the \(\quad 3 \mathrm{PL}=3 \mathrm{PL} . \mathrm{do}=\mathrm{OBV}=\) also
'They used to make the táng nets, ...'
(22) \(k a-k a=p a\).

NEG-RED=INSTR
'but no more.'
(22) \(a\) -
ah
'Mmm.'
(23) Lebi te=r-í li-li=pa te=tu,
clamshell 3PL=3PL-PL.get.PL do-RED=INSTR 3PL=carry.PL
'They get clamshells, and bring them back, ...'
(24) te móe te=r-í e ti-ti.

3PL fish 3PL=3PL-PL.get.PL 3PL.be 3PL.do-RED
'and they catch fish.'
(25) Te=bà húefa te=te ung \(a=w e\).

3 PL=person old 3 PL=3PL.do now the=this
'The old people do it now, ...'
(26) \(T e=a n g k u=w e=i n g t e\),

3PL=child=this=the 3PL
'the younger children, ...'
(27) \(\quad[\mathrm{bena}]=p a \quad t e=t i \quad e \quad t i\),
[string] \(=\) INSTR \(\quad\) 3PL=3PL.do 3 3PL.be 3PL.do 'they make them with string, ..."'
(28) Te Lóng-pa=ing,

3PL=Enggros=the
'in Enggros, ...'
(29) te=bà-hue te lang=ing \(a=p a \quad t e=t i \quad e\). 3PL=person-old 3PL net=the=INSTR 3PL=3PL.do 3PL.be 'the old people (still) make the nets.'
(30) Lang,
net
'And nets, ...'
(31) \(\grave{a}\)-pè=pe=ing \(a=p a \quad t e=t i \quad e\).
rope-3SG.F.GEN=3SG.F.DAT=the=INSTR 3 PL=3PL.do 3 PL.be 'they make the string for them.'
(32) Te Lóngpa=pa Te Pa yá-no-tè(=te).

Enggros=INSTR Tobati thing-work-3PL.GEN=3PL.DAT '(That's) the Enggros' and Tobatis' work.'
\(N e=M a ́ w o=p a \quad n e=\)
\(1 \mathrm{PL}=\mathrm{Mabo}=\) INSTR 1 PL
'Us Mabos, we, ...'
(34)

Te=Tángpe ne=já \(\quad i \quad n e=t i \quad k a\).
3PL=Skou Yambe 1PL=hit.PL LOC 1PL=1PL. NEG 'and the Skou Yambes, we strike but we don't make (them).'
(ká 'hit', or one of its alternants, is used with nets to describe their use, in a productive adjunct nominal construction)
(35) Ing a hú nì=li [nui], the story \(1 \mathrm{SG}=\) do 'That's my story.'
Pí=a hú-hú nì=li-li
speech=PROM story-RED 1SG=do-RED
'I've told the story.'
(viii) Húhú, te Lóng pa pa te Pa húhú te. Táng te ti e ti te húhú pè pe nì li li li. Lang hangling pe pè pe ing \(a\), ke bà hue, te te te jáng jàng pa. Te jàng ko, te rí rí pa te re tu me toe, te rí hí hí tí, te re mong tí ing a ko rong rong pa, hangling pè pe ing a. Hangling wíng, Te rí ko, táng te ti ti. Táng ing te ti ko ra, ka ka pa. Lebi te rí li li pa te tu te móe te rí e ti ti. Te bà húefa te te ung a we. Te angku we ing te, [bena] pa te ti e ti, Te Lóng pa ing, te bà hue te lang ing a pa te ti e. Lang, à pè pe ing a pa te ti e. Te Lóngpa pa Te Pa yá no tè te. Ne Máwo pa ne, Te Tángpe ne já i ne ti ka. Ing a hú nì li. Pí a hú hú nì li li.

\section*{9 Ang}

Fish poison (16 secs)
Many fish are caught in rivers by means of a poison that is produced from certain tree roots. This short text describes that process.
(1) Ang,
poison.root
'Poison, ...'
(2)
\begin{tabular}{lllll} 
ang & hangling & \(t e=r-e\) & \(t u\) & \(t e\) \\
poison.root & root & \(3 P L=3 P L-\) get.PL & carry.PL & 3SG.F.go \\
toe pa. & & \\
3.come water & & \\
'They get poison roots and take them to the river.'
\end{tabular}

Te=ueme ti te=r-í=ko,
3PL=woman 3PL.do 3PL=3PL-get.PL=OBV
'The women process it, and fetch it, and then, ...'
(4) táng=ing,
k.o.net=DEIC
'the tang nets, ...'
\begin{tabular}{llll} 
te=ueme \(t i\) & \(e\) & \(t i\), \\
3PL=woman 3PL.do & 3PL.be & 3PL.do \\
'the women make them, ...
\end{tabular}
(6) \(n e=u e\)-,

1PL=wom-
'we wom-, ...'
(7) Te=ueme te=ti=pa te,

3PL=woman 3 PL=3PL.do \(=\) INSTR 3SG.F.go 'the women make them until, ...'
(8) \(t e\), 3SG.F.go
'until, ...'
(9) \(t e=k o k a\),

3SG.F.go=OBV NEG
'until they're all used up, ...'
(10) \(k a=p a\),

NEG=INSTR
all gone, and then, ...'
(11) te=baléng te=r-é tu te tu pa

3PL=man \(\quad\) 3PL=3PL-get.PL carry.PL \(\quad\) 3SG.F.go carry.PL water
te móe te=r-í e ti-ti.
3PL fish 3PL=3PL-PL.get.PL 3PL.be 3PL.do-RED
'The men bring them down to the river, and catch fish.'
(12)

Pí=a húhú nì=li.
speech story \(1 \mathrm{SG}=\) do
'I've told my story.'
(ix) Ang hangling te re tu te toe pa. Te ueme ti te rí ko, táng ing, te ueme ti e ti, te ueme te ti pa te, te ko ka, ka pa, te baléng te ré tu te tu pa te móe te rí e ti ti. Pí a húhú nì li.

\section*{10 Uepong}

Marrying (1 min. 4 secs.)
The following is a fairly self-explanatory piece of autobiography, discussing her particular marriage and married life to a non-Skou person. We can also see the speaker getting distracted towards the end.
(1) Uepong nì=li=wi a húhú nì=li-li li. marriage \(1 \mathrm{SG}=\) do=this story \(1 \mathrm{SG}=\) do-RED do 'I want to tell a story about when I got married.'
(2) \(N \grave{l}\) ùepong \(n i ̀=l i \quad\) Te Lóngpa=we=ing.

1 SG marriage \(1 \mathrm{SG}=\) do Enggros=this=DEIC
'I married in Enggros.'
(3) \(A\).
ah
'Mmm.'
(4) Ì-ne-nì=ne,
father.in.law-1SG.DAT-1SG.GEN=1SG.DAT
'My (future) father in law, ...'
(5) \(k e \quad\) tang=pa \(k e=t i \quad\) bàme,

3SG.NF canoe=INSTR 3SG.NF=3SG.NF.go village
'he went to our village by canoe, ...'
(6) Te Lóng-,

Enggr-
'to Enggr- ...'
(the speaker starts to say Te Lóngpa 'Enggros', the ultimate destination, then realises she has gotten ahead of herself in the story)
(7) Te Máwo bàme=pa.

Skou Mabo village=INSTR
'to Skou Mabo village.'
(I do not know what the instrumental =pa is doing on bàme in this clause)
(8) \(N i=l a=p a\).
[ni lie pa]
\(1 \mathrm{SG}=\) accompany=INSTR
'I went with him.'
(9) \(T a n g=p a\),
canoe \(=\) INSTR
'in a canoe, ...'
(10) wang \(n e=t e=p a \quad n e=m o e=k o \quad n e=n e\)
sail \(1 \mathrm{PL}=1 \mathrm{PL} . g o=\mathrm{INSTR} \quad 1 \mathrm{PL}=\) return=OBV \(\quad 1 \mathrm{PL}=1 \mathrm{PL}\). go
\(k e=k e \quad k a\) moe toe bàm-,
3SG. NF=get carry return 3.come villag'we sailed and went back to (his) villag-, he took me with him, ...'
(11) Te Lóngpa bàme.

Enggros , village
'to Enggros.'
(12) Nì=moe loe nì=li Te Lóngpa bàme [tahun],

1SG=return come 1SG=do Enggros village [year]
'I went to live in Enggros in, ...'
(13) [ampat pulu anam].
[four ten six]
'Nineteen forty-six.'
(14) \(N i=m o e ~ l o e ~ n i ̀=l i=i n g ~ a=k o\)
\(1 \mathrm{SG}=\) return come \(1 \mathrm{SG}=\) do=the \(=\mathrm{OBV}\)
'I came to the village, and then I, ...'
(15) \(n(i=) l o e\),

1SG=come
'I came, ...'
(16) [tahun delap-],
[year eigh-] ,
'in eight, ...'
(17) [empat pulu delapang] \(=p a \quad k u\), [four ten eight] \(=\) INSTR child 'in '48 I had, ...'
(18) pe=bàhue nì=tanghang.

3SG.F=elder.sibling 1SG=face
'I had my first daughter, ...'
(19) A ku [cuga],
ah child [also]
'yes, a child too, ...'
(20) \(k u \quad n \grave{=}=l i\),
child \(1 \mathrm{SG}=\mathrm{do}\)
'I gave birth, ...'
(21) \(n a\),
or
'or, ...'
(22) \(k u \quad n i ̀=l i \quad\) [delapang].
child \(1 \mathrm{SG}=\mathrm{do}\) [eight]
'I had eight children.'
(23) Ung \(a=w e\),
now=this
'And now, ...'
(24) tata te=bà,
grandchild 3 PL=person
'and grandchildren, ...'
(25) tata-nì=ne=pa,
grandchild-1SG.GEN=1SG.DAT=INSTR
'my grandchild, now, ...'
(26) \(y a\),
thing
'whatsit, ...'
(27) ku-tè te=bà [suda] nawò. child-3PL.GEN 3PL=person [already] many 'their kids, there's already a lot of them.'
(28) \(N i=a \quad\) moeng \(\quad l i\),

1SG=PROM sit do 'I'm still around, ...'
(29) wi \(a\),
here
'here, ...'
(30) ung \(a\),
now
'now, ...'
(31) [umur]-nì=ne [tuju pulu tiga tahun skarang ini]. [age]-1SG. GEN=1SG.DAT [seven ten three year now this] 'I'm seventy three years old now, ...'
(32) ung \(a=w e\).
now=this
'now.'
(33) Félangro-ni \(=n e=a=\) ing. year-1SG.GEN=1SG.DAT=PROM=DEIC
'That's my age.'
(34) Félangro-ni=ne=pí [tuju pulu tiga tahun] ung \(a=\) we \(a\). year-1SG.GEN=1SG.DAT=even [seven ten three year] now=this 'I'm seventy three years old now.'
(x) Uepong nì li wi a húhú nì li li li. Nì ùepong nì li Te Lóngpa we ing. Ì ne nì ne, ke tang pa ke ti bàme, Te Máwo bàme pa. Nì la pa. Tang pa, wang ne te pa ne moe ko ne ne ke ke ka moe toe bàme, Te Lóngpa bàme. Nì moe loe nì li Te Lóngpa bàme. Nì moe loe nì li ing a ko nì loe, pe bàhue nì tanghang. Ku nì li. Ung a we, tata nì ne, ku tè te bà nawò. Nì a moeng li, wi a. Félangro nì ne pí 73 tahun ung a we a.

\section*{11 Pó}

Vegetables (1 min. 14 secs)
Skou people practice swidden agriculture, and this text describes the process of clearling, planting and maintaining a garden.
(1) Ne líhi ya-no ne=r-oe-roe te
1PL garden thing-work 1PL=1PL-get.PL-RED 3SG.F.go
pí=a húhú nì=li.
speech=PROM story \(1 \mathrm{SG}=\mathrm{do}\)
'I'm telling a story about us going and working in the garden.'
(2) Ne líhi náti ne=ne ne=pang-pang.

1PL garden new 1PL=1PL.go 1PL=chop.PL-RED
'We clear (it) away to make a new garden.'
(3) \([\varepsilon]\),
ah
'Ah, ...'
(4) ya-pe ne=wí-wí=pa ne=pang-pang=pa,
thing-3SG.F.GEN \(1 \mathrm{PL}=\) get.F-RED=INSTR \(1 \mathrm{PL}=\) chop.down.PL-RED=INSTR
'we take out its thingies, (the weeds), and chop down (the old branches), ...'
(5) \([\Xi \mathrm{E}]\) ne=wi \([\mathrm{Ma}]\) tàfi \(i \quad[\Xi \mathrm{~T}]\) bàng héngtong-tong \(=p a\), 1PL=lea- -ve stand yesterday three-RED=INSTR
'then we leave it stand for, oh, three days, ...'
(6) \(n e=n e ~ r a ́ ~ n e=t i-t i\).

1PL=1PL.go fire 1 PL=1PL.do-RED
'then we go and set fire to it, ...'
(7) Rá è=ko líhi=ing, [iौ光ịi]
fire burn=OBV garden=DEIC
'The fire burns in the garden, ...'
(9) péng-péng=pa.
clean-RED=INSTR
'clears (it) out.'
(10) Ne=ne ya ne=r-oe-roe líhi)=ing rong tue.
\(1 \mathrm{PL}=1 \mathrm{PL} . \mathrm{go}\) thing \(1 \mathrm{PL}=1 \mathrm{PL}-\mathrm{get} . \mathrm{PL}-\mathrm{RED}\) garden=DEIC old 3 SG.F.do 'We go and collect all the things that are in the old garden.'
(11) Ìno tong \(=p a\),
banana shoot=INSTR
'Shoots of a banana tree, ...'
(12) nále-tong \(=p a\),
taro-shoots=INSTR
'taro shoots, ...'
(13) pó-weng-tong \(=r a\),
vegetable-gedi-shoots=also
'gedi shoots, ...'
(14) rángueke \(=p a\),
sweet.potato=INSTR
'sweet potatoes, ...'
(15) ne=r-óe-róe lîhi ri-rong=pa.
\(1 \mathrm{PL}=1\) PL-get.PL-RED garden tree-old=INSTR
'we get them all from the old garden.'
(16) \(N e=n-a\) toe ne=wá-wá lí(hi) náti=ing \(a\).

1 PL=1PL-carry 1PL.come 1PL=plant-RED garden new=the
'We bring them there and plant them in the new garden, ...'
(17) Ne=wá loeng-loeng \(=p a\),
\(1 \mathrm{PL}=\) plant finish-RED=INSTR
'we plant them all, ...'
(18) ne=wi tàfi te,

1PL=leave 3SG.F.go
'we leave it, and ...'
(19) \(=k o\),
=OBV
'later, ...'
(20) ya-na ùe-ùe=pa,
thing-or old-RED=INSTR
'when they've more or less all ripened, ...'
(21) ne=ne \(n\)-a=ing a róe-róe ino \(n\) - \(a=\) ing 1PL=1PL.go 1PL-carry=the 1PL-get.PL-RED banana 1PL-carry=DEIC ne=r-óe-róe,
1 PL=1 PL-get.PL-RED
'we go and get them, we collect them, carrying the bananas away, ...'
(22) nále n(e)=ing-ing ne=r-oe-roe,
taro 1PL=pull/dig.up-RED 1PL=1PL-get.PL-RED
'we dig up the taro and take it out, ...'
\(\grave{e}=k o \quad\) líhi \(=\) ing,
burn=OBV garden=DEIC
'and burn off the garden, ...'
(24) líhi rong- rong=pa.
garden old- old=INSTR
'the old- the old garden, and.'
(25) Hang,
coconut
'Coconuts, ...'
(26) hang jàng=pa,
coconut old=INSTR
'and old coconuts, ...'
(27) \(p e=\) и́e \(=p a \quad y a \quad n e=n-a=k o \quad w a ́-w a ́ . ~\)

3SG.F=ripe=INSTR thing 1 PL=1PL-carry=OBV plant-RED
'when they're become ripe we take them, and then think about planting.'
(28) Péngue \(=i n g=p a\),
mango=DEIC=INSTR
'Mangoes, and, ...'
(29) hang=pa pe mong na=ing a mong-mong tue.
coconut=INSTR 3SG.F sit.F or=the sit.F-RED 3SG.F.do
'coconuts, because they're there, they're there.'
(30) \(N e=n-a=p a \quad w-a=k o\),
\(1 \mathrm{PL}=1 \mathrm{PL}-\) carry \(=\mathrm{OBV} \quad 3 \mathrm{SG} . \mathrm{F}-\) walk=OBV
'We take them, and then, ...'
(31) \(n e=w a ́=k o \quad n e=w a ́ \quad l o e n g=p a\).
\(1 \mathrm{PL}=\) plant=OBV \(\quad 1 \mathrm{PL}=\) plant finish=INSTR
'we plant them, until they're all done.'
(32) Ne=wi tàfi te=pa,
\(1 \mathrm{PL}=\) leave \(\quad 3\) SG.F.go=INSTR
'We just leave them to grow, ...'
\(t e=a n g k u\) -
3PL=child-
-nè=ne te=t-ang e.
-1PL.GEN=1PL.DAT 3PL=3PL-eat 3PL.be
'and our children can eat (the produce).'
(xi) Ne líhi yano ne roe roe te pí a húhú nì li. Ne líhi náti ne ne ne pang pang. Ya pe ne wí wí pa ne pang pang pa, ne wi tà fi í bàng héngtong-tong pa, ne ne rá ne ti ti. Rá è ko líhi ing, péng péng pa. Ne ne ya ne roe roe líhi ing rong tue. Ìno tong pa, nále tong pa, póweng tong ra, rángueke pa, ne róe róe líhi ri rong pa. Ne na toe ne wá wá líhi náti ing \(a\). Ne wá loeng loeng pa, ne wi tàfi te ko, ya na ùe ùe pa, ne ne na ing a róe róe ìno na ing ne róe róe, nále ne ing ing ne roe roe, è ko líhi rong rong pa. Hang jàng pa, pe úe pa ya ne na ko wá wá. Péngue ing pa, hang pa pe mong na ing a mong mong tue. Ne na pa ne wá ko ne wá loeng pa. Ne wi tàfi te pa, te angku nè ne te tang \(e\).

\section*{12 Móe}

Fish (55 secs)
Fishing contributes a significant portion of the protein in the Skou people's diet, and this narration describes the way men catch fish in groups from boats and bring them home to the village.
(1) Ne móe ne=yú ne ti-ti.

1PL fish 1PL=search.for 1PL.be 1PL.do-RED
'We go looking for fish.'
(2) \(N e=\) иете \(n e\),

1PL=woman 1PL
'Us women, ...'
(3) móe-há.
fish-what
any sort of fish.'
(4) Núng ne=r-oe-roe=pa.
k.o.net 1 PL=1PL-get.PL-RED=INSTR
'We take our nets, ...'

1PL=1PL-get.PL=also 1PL.go
'we get them, and then go, ...'
(6) núng ne=ne-ne \([\) [ Bi\(]=\mathrm{pa}\).
k.o.net 1PL=1PL.go-RED ?=INSTR 'we [?] the nets and go, ...'
(7) Pa-loeng,
river-road
'to the river, ...'
(8) hángpeng=wi \(a=p a\),
bush=this=INSTR
'or to the bush, and
(9) móe ne=r-oe-roe=pa ne=n-a me toe-toe
fish 1 PL=1PL-get.PL-RED=INSTR 1PL=1PL-walk PL.return 3.come-RED
bàme.
village
'we take the fish and bring them back to the village.'
(10) Te=baléng te=híng tang te=hì tang=pa,
\(3 \mathrm{PL}=\mathrm{man} \quad 3 \mathrm{PL}=\) different canoe \(3 \mathrm{SG} . \mathrm{PL}=\) go.down canoe \(=\mathrm{INSTR}\)
'The men do it differently, they go down to canoes, they go by canoe
(11) ná te \(=y-u ́=k o \quad t e=t e-t e\),
paddle 3 PL=3PL-paddle \(=O B V \quad 3 \mathrm{PL}=3 \mathrm{PL}\).go-RED
'they go paddling
(12) já lo.e=a=fue \(a\),
sea seaward= \(\mathrm{PROM}=\) that
'they go out to sea, ...'
(13) à te=r-í \(\quad y a=i n g=p a \quad\) móe te=r-í
rope 3 PL \(=3\) PL-PL.get.PL thing \(=\) INSTR fish 3 PL=3PL-get.PL \(e \quad t i-t e\).
3PL.be 3PL.do-RED
'they get them, thethingies, they get fish with those things.'
(14) Te táng \(w-a \quad e=\) é \(\quad\) e ti te \(a\),

3PL net 3SG.F-pull 3PL=3PL-PL.get.PL 3PL.be 3PL.do 3PL.go
'They get the nets that they've been pulling, ...'
(15) táfà te=r-í e ti,
all 3PL=3PL-PL.get.PL 3PL.be 3PL.do
'they get all kinds,...'
(16) móe hápa=ra te=r-í e ti.
fish little=also 3PL=3PL-PL.get.PL 3PL.be 3PL.do
'they get little fish too.'


3PL=3PL-get.PL=OBV canoe=DEIC full now=INSTR
'They get them in and fill up the canoe, ...'
te=r-e tu me hoe toe báng=pa, 3PL=3PL-get carry.PL 3PL.return come.landwards 3.come beach=INSTR
'they carry them back to the beach, and, ...'
\begin{tabular}{|c|c|c|c|}
\hline \(n e=a\) & \(t e=a n g k u \quad t e=t e\) & tang & te=wí-wí \(=p a\), \\
\hline \(3 \mathrm{PL}=\mathrm{PROM}\) & \(3 \mathrm{PL}=\) child \(3 \mathrm{PL}=3 \mathrm{PL} . \mathrm{go}\) & canoe & \(3 \mathrm{PL}=\) get.F-RED=INSTR \\
\hline & & & \\
\hline
\end{tabular}
'we, all the children, we pull in the canoe, and, ...'
\begin{tabular}{lllll} 
te=angku tang te=wí tu & hoe & toe & wí \\
3PL=child canoe & \(3 \mathrm{PL}=\) get.F carry.PL & come.landwards & 3.come & get.F \\
lopí hángto \(\quad\) ùepi=wi \(a=\) pa. & & \\
south sand \(\quad\) dry=this=INSTR & & \\
'the children pull the canoe up on the beach, to the dry sand, and then, ...'
\end{tabular}
Móe=ing te=r-i=ko te=ko ti-ti
fish=DEIC 3PL=3PL-get.PL=OBV 3SG.F.go=OBV 3PL.do-RED
3PL=child=INSTR food=DEIC 3 PL=3PL-get.PL carry.PL 3PL.return
te-te pá,
3PL.go-RED house
'they take the fish and the children get some food, and take it to the house,
and, ...'
\(t e=\) иeте \(=p a\),
3PL=woman=INSTR
'with th women, ...'
(23) te=angku=pa,

3 PL=child=INSTR
'and with the children, ...'
\(-t e ̀=t e\),
-3PL.GEN=3PL.DAT
'their ones, ...'
te=t-ang-tang pá.
3PL=3PL-eat-RED house 'they eat it at home.'
(xii) Ne móe ne yú ne ti ti. Ne ueme ne, móe há, núng ne roe roe pa. Ne roe ra ne, núng ne ne ne pa. Paloeng, hángpeng wi a pa, móe ne roe roe pa ne na me toe toe bàme. Te baléng te híng tang te hì tang pa, ná te yú ko te te te, já lo.e a fue a, à te rí ya ing pa móe te rí e ti te. Te Tangwa te rí e ti te a, táfà te rí e ti, móe hápa ra te rí e ti. Te rí ko tang ing pì ung pa te re tu me hoe toe báng pa, ne a te angku te te tang te wí wí pa, te angku tang te wí tu hoe toe wílopi hángto ùepi wi a pa. Móe ing te rí ko te ko ti ti te angku pa yong ing te ré tu me te te pá te ueme pa, te angku tè te pa, te tang tang pá.

\section*{13 Móe II}

Fish, II (40 secs)
This story describes the way women collect fresh-water fish, in smaller groups and with less fanfare (but more consistent results) than the male fishing style described in the previous text.
\begin{tabular}{llll} 
Ne=ueme & ne & núng & \(n e=r\)-ó \(e=k o\), \\
1PL=woman 1 PL & k.o.net & \(1 \mathrm{PL}=1 \mathrm{PL}\)-get.PL=OBV \\
'We women get the nets, and then, \(\ldots\).
\end{tabular}
\[
\begin{array}{llll}
n e=r-o ́ e & n-a & n e & b a ́ n g=p a,  \tag{2}\\
\text { 1PL=1PL-get.PL } & \text { 1PL-walk } & \text { 1PL.go } & \text { beach=INSTR } \\
\text { 'we take them down to the beach, and, } & \text {...' }
\end{array}
\]
(3) \(k e=i n g\) atakúkú=pa móewángto=pa ne=r-óe=ko 3SG.NF=DEIC fish(sp.)=INSTR fish(sp.)=INSTR 1PL=1PL-get.PL=OBV ne=r-óe \(=k o \quad n e=h i ̀ \quad[\mathrm{p}] w a ́\).
1 PL=1PL-get.PL=OBV 1PL=go.down carrying.basket
'there we get atakúkú fish, and móewángto fish, and put them in our baskets.'
(4) \(N e=r\)-óe \([h] i ̀ ~ w a ́=k o\),

1PL=1PL-get.PL go.down carrying.basket=OBV
'We put them in the basket, and then, ...'
(5) ne núng ne=ne=ko ne,

1PL k.o.net 1PL=1PL.be=OBV 1PL
'we go back to the nets, and then we, ...'
(6) móe \(n e=r\)-óe-róe \(=p a\),
fish 1 PL=1PL-get.PL-RED=INSTR
'catch some more fish, and, ...'
\[
\begin{equation*}
\text { ne=r-óe } \quad n-a \quad \text { moe ne bàme. } \tag{7}
\end{equation*}
\]
1PL=1PL-get.PL 1PL-walk return 1PL.go village
'we take them back to the village.'
(8) Ne=r-óe n-a moe ne bàme,

1PL=1PL-get.PL 1PL-walk return 1PL.go village
'We take them back to the village, ...'
(Here the 1PL form of the verb 'go' is given as ne, not the expected \(t i\). That this form was intended as 'go', and not 'be', was checked with the narrator)
(9) ne=hì te,

1PL=go.down 3SG.F.go
'and we put them down, ...'
(10) \(=p a \quad\) te=angku te=pa ne=n-ang-nang.
\(=\) INSTR 3 PL=child 3PL=INSTR \(1 \mathrm{PL}=1\) PL-eat-RED
'and then, with the children, we eat them.'
(11) \([\exists \mathrm{w}]\),
erm
'Erm, ...'
(12) Núng ne=r-óe=pa n-a hoe,
k.o.net \(1 \mathrm{PL}=1 \mathrm{PL}-\mathrm{get} . \mathrm{PL}=\mathrm{INSTR}\) 1PL-walk go.landwards
'We take our nets and go south, ...'
(13) n-a hoe,

1PL-walk go.landwards
'we go inland, ...'
(14) ne hángpeng,

1PL.go bush
'we go to the bush, ...'
(15)
ke=(i)ng tapíue=ing \(a\),
3 SG. NF \(=\) DEIC fish(sp.)=the
'there, for the tapíue fish, ...'
(a tapíue fish is a small freshwater fish found in the Skou area)
(16) te pa ko í i li ke=ing tapiue=ing a, 3SG.F.go river flow pool be do 3SG.NF=DEIC fish(sp.)=the 'to a river that flows and forms a pool, and there, the tapíue fish, ...'
(the last word is pronounced as [ta'pytiack )
(17) núng=ing,
k.o.net=DEIC
(18) ne=r-óe hì te pa.

1PL=1PL-get.PL go.down 3SG.F.go river 'we take our hand nets and go to the river.'
(19) Tapíue \(n e=r\)-óe-róe \(=p a\).
fish(sp.) 1PL=1PL-get.PL-RED=INSTR
'We catch lots of tapíue fish.'
(20) \(N e=h i ̀=k o\) wá \(p e=i n g=k o \quad n e=r\)-óe \(n-a\)

1PL=go.down carrying.basket 3SG.F=DEIC=OBV 1PL=1PL-get.PL 1PL-walk
moe ne,
return 1PL.go
'We put them in our carrying baskets, and then we walk back, ...'
\(t e=\grave{e}=k o\),
\(3 \mathrm{PL}=\mathrm{cook}=\mathrm{OBV}\)
'and they cook them, ...'
te \(=\) angku te \(=p a \quad n e=n\)-ang-nang,
3PL=child 3PL=INSTR 1PL-eat-RED
'and then we eat them with all the little children.'
(xiii) Ne ueme ne núng ne róe ko, ne róe na ne báng pa, ke ing atakúkú pa móewángto pa ne róe ko ne róe ko ne hì wá. Ne róe hì wá ko, ne núng ne ne ko ne, móe ne róe róe pa, ne róe na moe ne bàme. Ne róe na moe ne bàme, ne hì te pa te angku te pa ne nang nang. Núng ne róe pa na hoe ne hángpeng, ke ing tapíue ing a, te pa ko íi li ke ing tapíue ing a, núng ing ne róe hì te pa. Tapíue ne róe róe pa. Ne hì ko wá pe ing ko ne róe na moe ne, te è ko, te angku te pa ne nang nang.

\section*{14 Kóeng bang tue}

Broken teeth (1 min. 50 secs)
A month prior to the recording of this story in early 2002 the speaker had an accident returning to her home in Abepura from a visit to church in Sentani. As a result of this she suffered several
broken teeth, cuts to her face, and broke her glasses. This text describes what happened in the accident, and what happened after the event.
(1) \(N i ̀ ~ h u ́ h u ́ ~ n i ̀=l i-l i ~ l i . ~\) 1SG story 1SG=do-RED do 'I want to tell a story.'
(2) Kóeng-nì=ne=we (=ra) fèng, tooth-1SG.GEN=1SG.DAT=this=also bad 'My teeth were ruined, ...'
(3) lúto=we=ra fèng,
eye=this=also bad 'these eyes too were ruined, ...'
(4) pí a húhú nì=li-li.
language the story 1SG=do-RED
'that's the story that I'm going to tell.'
(5) \([\mathrm{ac}]\)
ah
‘Ah, ...’
(6) \(n i=e\) [motor],

1SG=travel.by [motorbike]
'I went by motorbike, ...'
(motor is Papua Malay for 'motorbike', used here first and corrected to Skou in the following line)
(7) tang-hápang.
canoe-motorbike
'a motorbike.'
(8) \(N e=n e\),

1 PL=1PL.go
'We went, ...'
(9) lú pong-pong ya ne=ti=pa,
eye shut-RED thing 1 PL=1PL.do=INSTR
'We had finished praying, and ...'
(10) ne=hí ne=ti ne,

1PL=go.down 1PL=1PL.go 1PL.be
'were going back down (to Abepura), ...'
(11) te=Húngfa=pa ne=moe e tue,

3 PL=Sentani=INSTR 1PL=return 3SG.F.be 3SG.F.do
'from Sentani, so we were returning, ...'
(12) \(n i ̀=k u \quad[\chi] i ́ \quad r e\)
\(1 \mathrm{SG}=\) fall go.down go
'and I fell off, ...'
(13) \([\) motor \(]=p a\) nì \(k u\) hí re.
[motorbike]=INSTR \(1 \mathrm{SG}=\) fall go.down go
'I fell off the motorbike.'
(14) \(N i=k u \quad[\mathrm{y}] i ́ \quad r e\),
\(1 \mathrm{SG}=\) fall go.down go
'So I fell down, and ...'
(15) lúto-tangpaya=we=pí=ra [ Y\(] a \quad\) fèng,
eye-glasses=this=even=also become bad
'these glasses were ruined, ...'
(16) \(a\),
ah
'ah, ...'
(17) Kóeng-nì=ne=we=pí=ra báng tue=ko ka
tooth-1SG.GEN=1SG.DAT=this=even=also break 3SG.F.do=OBV NEG 'And (my) teeth broke, they were no more.'
(18) \(N i=m o e l o e\),

1SG=return come
'I came back home, ...'
(19) Nì=lóeng te=angku-nì=ne,
\(1 \mathrm{SG}=\) say \(3 \mathrm{PL}=\) child-1SG.GEN=1SG.DAT
'and I said to my children,'
(20) " \(A\), taíngbe \(k a\),
ah money NEG
"Oh, I don't have any money, ...'
[riescmblari] nì=la re kóeng=we, ?? \(\quad 1 \mathrm{SG}=\) acquire go tooth=this
'give me some and I'll go and these teeth, ...'
(noone who has listened to this tape has any idea what the first four syllables in this line are, including the speaker, who denies having uttered them)
(22) náti te=r-é \(f a-f a\).
new 3PL=3PL-fit USE-RED
'I'll get some new (false ones) fitted.'
(23) \([\) Jari \(]\),
[so]
'So, ...'
(24) Lúto-tangpaya=we héfèng te=we nì-ne.
eye-glasses=this good 3PL=get 1SG.GEN-1SG.DAT
'I'll get some good glasses for myself.'
(25) \(T e=n\)-í, "Taíngbe ka."

3PL=3PL-tell money NEG
'They told (me), "We don't have any money."
(26) \(N i=m o e=p a\)
\(1 \mathrm{SG}=\) return=\(=\) INSTR
'I returned home, and ...'
(27) \(h u e=p a\),
stomach=INSTR
'thought and,...'
(28) fue \(n \grave{i}=l i=p a\)
cry \(1 \mathrm{SG}=\mathrm{do}=\mathrm{INSTR}\)
'I cried, and ...'
(29) hue palang,
stomach think
'thought about it,...'
(30) hue palang nì=oeng
stomach thing \(1 \mathrm{SG}=\) remember
'I thought and ...'
(31) Nì=lóeng Ta- "Áì!
\(1 \mathrm{SG}=\) say grand-(=God) father(=God)
'I said "Go- ... Lord!"
(Tata 'grandfather' is the term commonly used for 'God', but this speaker decided after starting to use a more intimate Ái here)
(32) \(N i=f a=p i ́ ~ n i ̀=l o ́ e n g ~ i ~ l i . ~\)
\(1 \mathrm{SG}=\) only=even \(1 \mathrm{SG}=\) say be do
'It is me who is talking.'
(33) Taíngbe \(m \grave{e}=a=p\)-óe p-eng,
money \(2 \mathrm{SG}=\mathrm{FOC}=2 \mathrm{SG}\)-get.PL 2 SG -give
'If you send some money to me, ...'
(34) nì=loe a re,
\(1 \mathrm{SG}=\) fetch carry go
'I will take it, and ...'
(35) Lúto-tangpaya nì=wí-wí,
eye-glasses \(\quad 1 \mathrm{SG}=\) get.F-RED
'get some new glasses, ...'
(36) kóeng ya nì=wí héfèng te=r-e fa-fa, tooth thing \(1 \mathrm{SG}=\) get.F good \(3 \mathrm{PL}=3 \mathrm{PL}-\mathrm{fit}\) USE-RED 'and those tooth things, I'll get some good ones and they can fit them, ...'
(37) kóeng náti te=r-í.
tooth new 3PL=3PL-get.PL
'they'll put in some new teeth.'
(38) \(N i=m o e n g=k o\),
\(1 \mathrm{SG}=\mathrm{sit}=\mathrm{OBV}\)
'I waited, ...'
(39) ké áling,
moon one
'for one month, ...'
(40) \(k e=t o e=p a\),

3SG.NF=3SG.NF.come=INSTR
'and then he came, and, ...'
(41) \(a\),
ah
'ah, ...'
\(k e=a n g k u-n i ̀=n e \quad k e=k-a ́ \quad i \quad t e\), 3SG. \(\mathrm{NF}=\) =child=1SG.GEN-1SG.DAT 3SG.NF=3SG.NF-walk 3SG.NF.be 3SG.F.go
'my son came up, ...'
(note the disagreement between 'be' and 'go' in this clause)
(43) jéng hangbang=fue a \(k e=k-a ́=k o \quad\) toe. place far=that 3SG.NF=3SG.NF-walk=OBV 3SG.NF.come 'from a distant land he came.'
(44) \(K e=a n g k u=w i\),

3SG.NF=child=this
'This son of mine, ...'
(45) nì=fue-lang \(k a\),

1SG=see-recognise NEG
'I didn't recognise him, ...'
(46) \(k e=b a ̀ ~ n i ̀=f u e-l a n g ~ k a\),

3SG.NF=person 1SG=see-recognise NEG
'I didn't recognise this man, ...'
(47) Áì lóeng=ko \(k e=t o e\),
father say=OBV 3SG.NF=3SG.NF.come
'God arranged for him to come, ...'
(48) \(k e=a=t o e=p a\),

3SG. NF=FOC=3SG.NF.come=INSTR
'and he came, and then ...
(49) taíngbe ke=loe léng nì=a re.
money 3SG.NF=get.PL give 1SG-fetch go
'he gave money to me.'
(50) Lúto-tangpaya=we nì=wí,
eye-glasses=this \(\quad 1 \mathrm{SG}=\) get.F
'I got this money, ...'
(51) kóeng \(=a \quad\) ung \(=a=p a \quad\) te \(=l e ́ \quad e \quad t i\).
tooth=FOC now=FOC=INSTR 3PL=chop.down 3PL.be 3PL.do 'and now they're taking out these teeth.'
(52) Fé na fétang=pí ung,
tomorrow or day.after.tomorrow=even now
'Tomorrow, or the day after tomorrow, ...'
(53) kóeng=we te=wí fa-fa ti, tooth=this 3PL=get.F USE-RED 3PL.do
'they'll pull out these teeth, ...'
(54) taíngbe \(k e=a\) loe leng.
money 3SG.NF=FOC get.PL give
'he gave the money.'
(55) \(A a\).
mm
'Mmm.'
(56) Nì Áì pí nì=lóeng \(i \quad l i-l i\).

1 SG father speech \(1 \mathrm{SG}=\) say be do-RED
'I was asking God.'
(57) \(K e=k-a ́\)
hangbang=ko \(k e=k-a ́ \quad n e ̀-n e=k o\)
3SG.NF=3SG.NF-walk far=OBV 3SG.NF=3SG.NF-walk whereRED \(=0 B V\)
\(k e=t o e\) ?
3SG. NF=3SG.NF.come
'He came from where is it, where he came from?'
(58) \(A\),
well
‘Anyway, ...'
(59) \(k e=a \quad k e=t o e=p a\),

3SG.NF=FOC 3SG.NF=3SG.NF.come=INSTR
'he came, ...'
(60) kóeng=we \(k e=f u\) te fèng, tooth=this 3SG.NF=see 3SG.F.go bad 'he saw that these teeth were ruined, ...'
(61) lúto-tangpaya=we=ra fèng, eye-glasses=this=also bad 'that these glasses too were ruined, ...'
(62) \(a \quad k e=w o ̀=l o ́ e n g\), ah 3SG.NF=EMPH=say 'and he himself said, ...'
(The pitch on \(k e=w o ̀=l o ́ e n g\) is 554422 , with the fall of wò dominating the word)
(63) \(n \grave{=}=r a=w a \quad k a\), 1SG=also=beg NEG 'I didn't beg him, ...'
(64) nì=wa \(\mathrm{ka}=\mathrm{pa}\),

1SG=beg NEG=INSTR
'I didn't beg, but straight away ...'
(65) \(k e=r a=w o ̀=l o ́ e n g ~\) 3SG.NF=also=EMPH=say 'he was the one who said'

(67) Ya-nì lúto-tangpaya te=we fa-fa, thing-1SG.GEN eye-glasses 3PL=get USE-RED 'They will fit some glasses for me, ...'
(68) kóeng \(=r a\), tooth=also 'and teeth, ...'
kóeng náti te=r-e hi=hi. tooth new 3PL=3PL-fit go.down=RED 'they're going to put in some new teeth.'
\begin{tabular}{lll} 
Te=angku-nì=ne & [héran] & \(t e=t i\), \\
3PL=child-1SG.GEN=1SG.DAT & [surprise] & \(3 \mathrm{PL}=3 \mathrm{PL} . \mathrm{do}\) \\
'My children were [heran], ...' & &
\end{tabular}
(heran is Indonesian for 'be surprised', used here by the bilingual speaker, who repeats the sentence in Skou in the next line)
\begin{tabular}{llll} 
pí & \(t e=n-i\) & \(e\) & \(t i\). \\
surprise & 3PL=3PL-tell & 3PL.be & 3PL.do \\
'they were & surprised.' & &
\end{tabular}
(xiv) Nì húhú nì li li li. Kóeng nì ne we ra fèng, lúto we ra fèng, pí a húhú nì li li. Nì e tanghápang. Ne ne, lú pong pong ya ne ti pa, ne hí ne ti ne, te Húngfa pa ne moe e tue, nì ku hí re pa, nì ku hí re. Nì ku hí re, lúto tangpaya we pí ra wa fèng, a, wì ta jí. Kóeng nì ne we pí ra báng tue ko ka Nì moe loe, Nì lóeng te angku nì ne, "A, taíngbe ka, nì la re kóeng we, náti te ré fafa. Ing a lúto tangpaya we héfèng te we nì ne. Te ní, "Taíngbe ka." Nì moe pa hue pa, fue nì li pa hue palang, hue palang nì oeng Nì lóeng "Áì! Nì fa pí nì lóeng i li. Taíngbe mè a póe peng, nì loe a re, lúto tangpaya nì wí wí, kóeng ya nì wí, héfèng te re fafa, kóeng náti te rí. Nì moeng ko, ké áling, ke toe pa, ke angku nì ne ke ká i te, jéng hangbang fue a ke ká ko toe. Ke angku wi, nì fuelang ka, ke bà nì fuelang ka, Ái lóeng ko ke toe, ke a toe pa, taíngbe ke loe lé nì a re. Lúto tangpaya we nì wí, kóeng a ung a pa te lé e ti. Fé na fétang pí ung, kóeng we te wí fafa ti, taíngbe ke a loe leng. Nì Ái pí nì lóeng i li li. Ke ká hangbang ko ke ká nè ne ko ke toe? Ke a ke toe pa, kóeng we ke fu te fèng, lúto tangpaya we ra fèng, ke wò lóeng, nì ra wa ka, nì wa ka pa, ke ra wò lóeng "Taíngbe nì a loe leng pa poe ma me. Ya nì lúto tangpaya te we fafa, kóeng ra, kóeng náti te re hè hè. Te angku nì ne pí te ni e ti.

\section*{15 Te Táng pìng-tè}

World War II ( 2 mins 20 secs)

The Second World War came to the Skou people as a shock, not so much for the fighting it brought, which was minimal in the region, but for the pace of introduction of new things. The change of the Japanese for the Dutch was not such a change, and, as this story relates, was in the main peaceful (though some people did lose their lives). When an airstrip was built, however, in the land now known as Skou Yo about half a kilometre south of Skou Mabo (and immediately behind the offices of the camat for MuaraTami subdistrict), the shock of having the first planes land amongst them was so great that many Skou residents fled, never to return. Some ran up the Tami river and moved inland to Nyao, others east to Wutung, and some more vanished into the jungle and presumably perished.
(1) Te=táng te=hòe foe fitong-nè=ne te=wí 3PL=bird 3PL=come.landward 3.come land-1PL.GEN=1PL.DAT 3PL=get.F pí=a hú nì=li \(i \quad l i\). speech \(=\) PROM story \(1 \mathrm{SG}=\) do be do
'I'm going to tell a story about the Indonesians coming and taking our land.'
(2) Lópa,
earlier
'Before, ...'
(3) \(n e\),

1PL
'we, ...'
(4) te=bà Balanda te=pa ne=moeng.

3PL=person Holland 3PL=INSTR 1PL=sit
'we lived together with the Dutch, ...'
(5) \(N e=m o e n g=k o \quad k a=i n g=p a\),

1PL=sit=OBV NEG=DEIC=INSTR
'We lived like that until, ...'
(6) [taung empat pulu empat]
[year four ten four]
'nineteen forty four, ...'
(7) [baru] Jepang hoe toe.
[and.then] Japan come.landwards 3.come
'then the Japanese came.'
(8) Jepa[ท̣] hoe toe,

Japan come.landwards 3.come
'So the Japanese came, ...'
(9) te=pa ne=moeng,

3PL=INSTR \(1 \mathrm{PL}=\) sit
'and then we lived with them, ...'
(10) ya-no ya ne=ti=pa n-ang ne,
things thing \(1 \mathrm{PL}=1 \mathrm{PL} . \mathrm{do}=\mathrm{INSTR}\) 1PL-eat 1 PL. be
'we'd do things, and eat, ...'
(11) yano fèng te=ti ka,
thing bad 3PL=3PL.do NEG
'they didn't do bad things, ...'
(12) \(t e=p a \quad\) ya ne=lúe=pa \(n=\)-ang ne.

3PL=INSTR \(1 \mathrm{PL}=\) together=INSTR thing \(1 \mathrm{PL}=1\) PL-eat 1 PL. be
'we'd eat together.'
(13) \(\mathrm{Te}=\mathrm{ní}=\mathrm{ko}\),

3PL=[...]=OBV
They'd [...] and then, ...'
(14) yano ne=r-óe ne,
things 1PL=get.PL 1PL.be
'we'd collect things, ...'
(15) Skou Yo hángpeng,

Skou Yo bush
'the bush at Skou Yo, ...'
(16) hángpeng-nè=ne.
bush-1PL.POSS=1PL.DAT
'our bush.'
(17) \(T a\) bápáli ke=i li Skou Yo.
elephant.grass big 3SG.NF=be.at do Skou Yo
'There was a lot of elephant grass there at Skou Yo.'
(note the very unusual use of \(i\) as a main verb here, indicating the 'lying' of the grass)
(18) Fue \(a\).
there
'Over there.'
(19) Ya-no ne=r-óe ne te=ueтe=pa te=balèng=pa,
thing-work \(\quad 1 \mathrm{PL}=1\) PL-get.PL \(\quad\) 1PL.be \(\quad 3 \mathrm{PL}=\) woman=INSTR \(\quad 3 \mathrm{PL}=\mathrm{man}=\mathrm{INSTR}\)
'We did a lot of work, us, the women and the men, ...'
(20) ya-no ne=r-óe ne=ing a.
thing-work 1PL=1PL-get.PL 1PL=the
'We did the work, we did.'
(21) Pesawa-tè=te pe=ra-rapue \(\quad k e=i n g a\).
plane-3PL.GEN=3PL.DAT 3SG.F=also-descend 3SG.NF=the
'Their plane even landed there.'
(22) \(P e=\) rapue \(=p a\) toe \(e=i n g\) a

3SG.F=descend=INSTR go.down 3.come 3SG.F.be=the
ya pe=r-ú pu=pa toe fue e=ing \(a\). thing 3SG.F=3SG.F-lay 3SG.F.carry=INSTR 3.come that=the 'It came down there, and that's why it put out all its things there.'
(23) \([\mathrm{Ya}]\),
well
'Well, ...'
(24) ya-no \(n e=r-o ́ e=k o=k a=i n g=p a\),
thing-work 1PL=1PL-get.PL=OBV=FOC=DEIC=INSTR
'we did this work, and ...'
(25) Amerika=we [landing] te=ti,

America=this [landing] 3PL=3PL.do
'the American (force)s landed, ...'
te=rapue hì toe.
3PL=descend go.down 3.come
'they landed.'
(27) Te=hoe toe,

3pL-come.landwards 3.come
'So they came, ...'
(28) tu jíngpa e tue=we a te=hoe toe, ship fly 3SG.F.be 3SG.F.do=this 3PL-come.landwards 3.come 'the plane flew in and landed, ...'
(29) pìng-,
war-
'and war, ...'
(30) pìng te=r-ú,
war 3PL=3PL-release
'they waged war, ...'
(31) \(t e=r-u ́ \quad e=p a\),

3 PL=3PL-release 3 PL.be \(=\) INSTR
'they fought, ...'
(32) te=bà Jepang=ing a te=jí e.

3PL=person Japan=the 3PL=hit.PL 3PL.be
'they killed the Japanese.'
\[
\begin{align*}
& \text { Te=tú }=p a \quad t e=j \dot{l}=k o \quad k a=i n g=p a \quad t e=m o e  \tag{33}\\
& \text { 3PL=bring=INSTR } \quad 3 \mathrm{PL}=\text { hit.PL=OBV } \mathrm{NEG}=\mathrm{DEIC}=\mathrm{INSTR} \quad \text { 3PL=return } \\
& \text { y-atà. } \\
& \text { 3PL-run } \\
& \text { 'They brought them and killed them all, and then they ran home.' }
\end{align*}
\]
(34) \(T e=\) moe \(y\)-atà=ing \(a\),
\(3 \mathrm{PL}=\) return \(3 \mathrm{PL}=\) run=the
'When they went home, ...'
(35) \(n e=r a \quad[\mathrm{iko}]\),
\(1 \mathrm{PL}=\) also [accompany]
'we went along as well, ...'
(36) \(n e=r a=l a \quad n=p a \quad n\)-a tà
\(1 \mathrm{PL}=\) also=accompany \(\quad 1 \mathrm{PL} . \mathrm{go}=\mathrm{INSTR} \quad 1 \mathrm{PL}=\) return \(\quad 1 \mathrm{PL}=\) walk running
'we too went along with them, and ran home.'
(37) Ne=moe n-atà=ko te ka-ung ne=moe n-atà 1PL=return 1PL-run=OBV 3SG.F.go now 1PL=return 1PL-run hì toe Tangwáto, go.down 3.come Tangwato
'We ran back, now we ran back down to Tangwato, ...'
(38) báng,
beach
'the beach, ...'
(99) pí=wi \(a\),
mountain=this
'at this mountain, ...'
(39) ne ka-ung ne=moe hoe ne Te Jáwung, 1PL now 1PL=return come.landwards 1PL.go Nyao 'and then we came back to Nyao, ...'
(40) fue \(a\),
there
'over there, ...'
(41) te ka-ung te=me e ti TeÓeti. 3PL now 3pL=return. 3PL.be 3PL.do Wutung 'they were going back to Wutung.'

Ne=moe \(\quad n e=m o e=i n g a=k o\),
\(1 \mathrm{PL}=\) return \(\quad 1 \mathrm{PL}=\) return=the \(=0 B V\)
'We came back, and after we returned, then, ...'
(43) Amerika=ing a hóe [landeng] te=toe te=ti

America=the come.landward [landing] 3PL=3.come 3PL=3PL.do
ping te=ti=ko,
war 3 PL=3PL. \(d o=O B V\)
'America came, they arrived, and they waged war, ...'
(44) Jepang=ing a \(t e=m e=k o \quad k a=p a\).

Japan-the \(\quad 3 \mathrm{PL}=\) PL.return=OBV \(\quad\) NEG=INSTR
'the Japanese all went home, and there weren't any left.'
(45) Te=rapue hì te bàme=we te=tue pí=ko,

3PL=descend go.down 3PL=village=this 3PL=come fall=OBV
'They America flew down to this village, they fell down, ...'
héfèng= \(p a\),
good=INSTR
'it was alright, ...'
(47) ne te=t-é r-í=ko ne te=r-e toe

1PL 3PL=3PL-speak 3PL-get.PL=OBV 1PL 3PL=3PL-PL.stand 3.come moe toe.
return 3.come
They called us, and then they were there and we all went home.'
\begin{tabular}{lll}
\(\mathrm{Ne} \quad\) te=r-e & toe & moe toe \\
1PL \(3 \mathrm{PL}=3 \mathrm{PL}-\) get.F & 3.come return & 3.come
\end{tabular}
(The use of \(r e\) for 'get' is irregular, and not part of the prescriptive paradigm for the verb. We can note the use of \(r\) ' for 3PL in the complex lexeme mòng wí 'be hit', in which the verb is related to we 'get (feminine object)'. Although the plural forms of wé do not regularly inflection, the existence of a distinct inflection in the complex lexeme is support for the idea that the language previously had a more complex paradigm for wé, which in some older speakers, such as the narrator of this story, is still occasionally realised, even though it is not prescriptively bad)

Amerika \(t e=f a=j-a\),
America 3 PL=only=3PL-hit,
'the Americans made it, ...'
(50) lòengma te=wí=ko Nofé w-a=ko=ra te road \(3 \mathrm{PL}=\) get.F=OBV Jayapura 3SG.F-walk=OBV=also 3SG.F.go
hi Te Húng te \(w\)-a=ko [Genyem]=fue \(a\) go.down Sentani 3SG.F-walk=OBV 3SG.F.go Genyem=that \(w-a=k o\) te Te Máwo.
3SG.F-walk=OBV 3SG.F.go Skou Mabo
'they built the road that goes from Jayapura, goes (over and) down to Sentani, over to Genyem, and goes to Skou Mabo.'
(51) Ing \(a\),
the
'So, ...'
(52)
\begin{tabular}{|c|c|c|c|c|}
\hline ya-lilipa & héfèng & Amerika=fa & \(t i=k o\) & héfèng \\
\hline thing-all.things & s good & \multicolumn{3}{|l|}{America=only 3PL.do=OBV good} \\
\hline \(n e=a \quad n\) & moeng \(=k o\) & tue e. & e. & \\
\hline \(1 \mathrm{PL}=\mathrm{PROM}\) S & sit=OBV & 3SG.F.do 3 & 3SG.F.be & \\
\hline 'all sorts of go and we just s & good things, stayed in pl & Americans & were the ones & o fixed th \\
\hline
\end{tabular}
(53) \(Y a\),
well
'Well, ...'
(54) Amerika te=hòe toe pìng te=ti,

America 3PL=arrive 3.come war 3PL=3PL.do
'America came and waged war, ...'
\[
\begin{array}{lll}
\text { te=bà Jepang } & t e=j i ́ & e  \tag{55}\\
\text { 3PL=person Japan } & 3 \mathrm{PL}=\text { hit.PL } & \text { 3PL.be } \\
n e=b a ̀ ~ M o e ~ & t e=j i ́ & k a . \\
\text { 1PL=person Papua } & \text { 3PL=hit.PL } & \text { NEG } \\
\text { 'They killed the Japanese, but they didn't kill us Papuans.' }
\end{array}
\]
(56) \(N e=a \quad\) moeng te=toe e.
\(1 \mathrm{PL}=\mathrm{PROM}\) sit 3PL=3.come 3PL/be
'We just stayed here, and they came.'
(57) Te=bà Amerika te=bà [kaya]=wò,

3PL=person America 3PL=person [rich]=EMPH
'Americans are really rich people, ...'
(58) ya-lilipa pà=wò tue.
thing-all.things full=EMPH 3SG.F.do
'they have all sorts of good things.'
( \(p \grave{a}=w o ̀\) is realised with a single HL over the whole word, 4422 )
(xv) Te táng te hòe toe fítong nè ne te wí pí a hú nì li i li. Lópa, te bà Balanda te pa ne moeng. Ne moeng ko ka ing pa, Jepang hoe toe. JepaN hoe toe, te pa ne moeng, ya no ya ne ti pa nang ne, yano fèng te ti ka, te pa ne lúe pa ya ne nang ne. Te ní ko, yano ne róe ne, Skou Yo hángpeng, hángpeng nè ne. Ta bápáli ke i li Skou Yo. Fue a. Ya no ne róe ne te ueme pa te balèng pa, ya no ne róe ne ing a. Pesawa tè te pe rarapue ke ing a. Pe rapue pa hì toe e ing a ya pe rú pu pa toe fue e ing a., ya no ne róe ko ka ing pa, Amerika we te rapue hì toe. Te hoe toe, tu jíngpa e tue we a te hoe
toe, pìng pìng te rú, te rú e pa, te bà Jepang ing a te jí e. Te tú pa te jí ko ka ing pa te moe yatà. Te moe yatà ing \(a\), ne ra, ne ra latì pa ne moe natà. Ne moe natà ko te ka ung ne moe natà hì toe Tangwáto, báng, pí wi a, ne ka ung ne moe hoe ne Te Jáwung, fue a, te ka ung te me e ti Te Óeti. Ne moe ne moe ing a ko, Amerika ing a hóe te toe te ti ping te ti ko, Jepang ing a te me ko ka pa. Te rapue hì te bàme we te tue pí ko, héfèng pa, ne te té rí ko ne te re tue moe toe. Ne te re toe moe toe ne moe bàme pa, Amerika te fa ja, lòengma te wí ko Nofé wa ko ra te hì Te Húng wa ko te fue a wa ko te Te Máwo. Ing a, ya lilipa héfèng Amerika fa ti ko héfèng ne a moeng ko tue e. Ya, Amerika te hòe toe pìng te ti, te bà Jepang te jí e ne bà Moe te jí ka. Ne a moeng te toe e. Te bà Amerika te bà wò, ya lilipa pà wò tue.

\section*{16 Amerika}

\section*{America (1 min. 25 secs)}

Following the ousting of the Japanese forces from the Hollandia area in 1942, during the Second World War, there was a period, only a few years long, of massive American basing in the area immediately west of Skou. General Macarthur built a base on the hill known as Ifar Gunung near Lake Sentani, and for the next few months moved in vast quantities of war supplies and thousands of personnel. This text follows on from text 15 (both thematically and in actual narration), and describes the various amazements that the Skou people felt as a result of the Americans arriving. Lines (3) - (7) apparently describe an air drop of lots of boxes of live chickens that were dropped at sea, as unlikely as it might sound. It was probably just as confusing for the Skou people at the time.
(1) Amerika te=toe a \(n e=w \grave{o}=a=f a \quad n e-n e\) America \(3 \mathrm{PL}=3\).come uh \(1 \mathrm{PL}=\mathrm{EMPH}=\mathrm{PROM}=\) only 1 PL.go-RED
\begin{tabular}{lll}
\(t e=t u e-t u e\) & \(w a\) & \(t i=p a\) \\
3PL=grow.up-RED & raise & 3PL.do=INSTR
\end{tabular}
te ne=húe tà=pa bápáli.
3PL 1PL=stomach adoptive.parents=INSTR big
'The Americans came, and us, well they brought us up, they raised us, they were dear parents to us.'
(2) Ya-yong -,
thing-food
'food, ...'
(3) Ya-yong te=te te=r-é tue toe,
thing-food 3 PL=3PL.do 3 PL=3PL-get.PL 3SG.F.do 3.come
'They got all sorts of food, ...'
(4) ojíng \(t e=r-i ́ \quad h i ̀\),
chicken 3PL=3PL-PL.get.PL go.down
'they dropped lots of chickens, ...'
[kas pele] re yang \(t e=t i ́\),
[CAUS=release] go vomit 3PL=3PL.do 'they let them out in a spray, ...'
(6) \(t^{\prime}=f a=p a\),
sea=only=INSTR
'over the sea, ...'
(7) te \(h o e=p a \quad\) Te Máwo báng=fue
come.landwards=INSTR 3SG.F.go Skou Mabo beach=that
\(n e=r\)-óe \(=p a\),
\(1 \mathrm{PL}-\mathrm{get} . \mathrm{PL}=\mathrm{INSTR}\)
'they washed up on the land, on the beach at Skou Mabo, and we collected them, ...'
(8) ne=r-óe \(n a=p a\) ne=ne.

1 PL=1PL-get.PL or=INSTR 1 PL=1PL.be
'we collected them, we did that.'
(9) \(A\),
ah
‘Uh, ...'
(10) ne=r-oe \(n-a=p a \quad n e=r-e-r e ́ \quad\) fu mong

1PL=1PL-get.PL 1PL-carry=INSTR 1PL=1PL-get.PL-RED put.down sit.F píng=pa,
platform=INSTR
'we got them all, and took them and then we put them down on the grill and, ...'
(11) \(\grave{e}=p a \quad n e=n\)-ang \(n e\).
cook=INSTR 1PL=1PL-eat 1PL.be
'we grilled them and then we ate them.'
(12) \(A\),
ah
'Uh, ...'
(13) [gudang]=ing bápáli=wò,
[shed]=DEIC \(\quad\) big=EMPH
'There was a really big storage shed, ...'
\(t e=t i=k o \quad \grave{e}\),
\(3 \mathrm{PL}=3 \mathrm{PL} . \mathrm{do}=\mathrm{OBV}\)
'they made it, ...'
(15) Pa long báng=wi a.

Kali Buaya beach=this
'at the beach at Kali Buaya.'
(16) \(\mathrm{Ne}=\) toe=pa ya-yong ne=[पé] ne=w-á=pa,
\(1 \mathrm{PL}=\) come=INSTR thing-food \(1 \mathrm{PL}=\) get.F \(1 \mathrm{PL}=3\) SG.F-walk=INSTR
'We went there, and got food, and things, took them, ...'
(a speech error here as the narrator uses a 1PL clitic with a 3SG.F verb form. The verb following ya-yong is wé 'get.F')
\begin{tabular}{lll} 
ne=r-oe & moe= \(=p a\) & \(n e=b a ̀ m e . ~\) \\
1PL-get.PL & return=INSTR & 1PL=village \\
'we got them and went back, to our village.
\end{tabular}
(18)
[Beras],
[rice]
'Rice, ...'
(19) \(=p a y a-l i l i p a\),
\(=\) INSTR thing-all.things
'and all sorts of things, ...'
```

te=ti=ko [kaya] ta[\]]a bàme-nè=ne.

3PL=3PL.do=OBV [rich] all village-1PL.GEN=1PL.DAT
'they really made it all rich in our village.'

```
(here the narrator uses táfà for fátà 'all', an accepted but rare variant)
(21) \(F e=r a \quad t e=t e \quad b a ́ n g=f u e\),
tomorrow=also 3 PL=3PL.go beach=that
'The next day they went to the beach as well, ...'
(22) hìue,
pandanus
'the pandanus trees, ...'
(23) hìue pèng re,
pandanus outside stand.PL
'down just past where the pandanus trees are, ...'
(24) [kelambu] te=r-í li=ing \(a=p a\),
[mosquito.net] 3PL=3PL-PL.get.PL sea.side=the=INSTR
'they set up mosquito nets by the sea, ...'
(25) te ke=ing a ráng-ráng te=ing \(a\),

3PL 3SG.NF=the sun-RED 3PL=the
'and over there, in the middle of the day, ...'
(26) lòeng te \(=y\) - \(a \quad\) báng=ing te \(=f a=w i \quad y\)-atà \(=p a\)
road 3 PL=3PL-walk beach=DEIC 3 PL=only=this 3 PL-run=INSTR \(t i \quad e\).
3PL.do 3PL.be
'they'd walk about on the beach, they'd just run around.'
(27) Báng=ing te \(=f a=\) wi \(a\),
beach=DEIC 3PL=only=this
'Just on that beach, ...'
(28) Amerika=fa te=fa y-atà=pa ti e.

America=only 3PL=only 3PL-run=INSTR 3PL.do 3PL.be 'the American's just ran around.'

Ne=bàme ya [susa]=ra ka,
1PL=village thing [difficult]=also NEG
'They didn't make things hard for us in the village, ...'
(Note the lack of proclitic agreement on the Malay word susa)
(30)
\(y a\)-lilip \(a=k a=r a \quad k a\),
thing-all.things \(=\mathrm{NEG}=\) also NEG
'there wasn't a shortage of things, ...'
(note the very interesting structure here, with negation nested in the nominalisation, as shown by the placement of the phrase-final clitic at the end of the NP, and then a further negation negating the clausal proposition, which is the NP)
(31) ya-lilipa pà=fa, thing-all.things complete=only
'all sorts of things, ...'
(99) ya-yong taíngbe,
thing-food money
'food, money, ...'
(32) ró,
clothes
'clothes, ...'
(33) ró te=a fí=a r-e nì e.
clothes 3PL=PROM come.across=PROM 3PL-get.PL 1SG 1PL.be
'give them to me.'
(34) Te=r-oe \(y-a(n g)=p a\) te ne ne=r-oe ne. 3PL=3PL-get.PL 3PL-walk=INSTR 3PL 1PL 1PL=1PL-get.PL 1PL.be 'They'd bring them and we'd get them.'
(35) Ya-lilipa pà,
thing-all.things complete
'Every kind of thing, ...'
(36) te=hoe toe.

3PL=come.landwards 3.come
'they arrived.'
(37) \(A \quad t e=a\),
ah 3 PL=PROM
'Uh, then they...'
\(t e=m e=a=k o \quad t e=m e\),
\(3 \mathrm{PL}=\mathrm{PL}\).return \(=\mathrm{PROM}=\mathrm{OBV} \quad 3 \mathrm{PL}=\mathrm{PL}\). return
'they went back, and afterwards they went back, ...'
te=me=pa ung te=a hoe toe.
3 PL=PL.return \(=\) INSTR now 3 PL=PROM come.landwards 3.come 'they went back, and now they've come, ...'
(40) Ke=Lóngpa-tè nì ana ke=Húng-tè

3SG.NF=Enggros-3PL.GEN 1SG like 3SG.NF=Sentani=3PL.GEN
ne=lúe \(=p a \quad k e=f e \quad k e=L o ́ n g p a-t e ̀\) 1PL=know=INSTR 3SG.NF=see.PL 3SG.NF=Enggros-3PL.GEN
\(k e=H u ́ n g-t e ̀ \quad\) anake lúe \(=p a \quad k e=f e\).
3SG.NF=Sentani-3PL.GEN 1DU know=INSTR 3SG.NF=see.PL
'Enggros, that lot, and, me (us Skous), like the Sentanis, we knew, and he could see, us Enggros and Sentani knew they could see.'
(41) Uung te=a hoe toe,
U.N. 3PL=PROM come.landwards 3.come
'The United Nations came, ...'
(42) \(t e=m e=k o \quad t e=m e\),

3PL=PL.return=OBV 3PL=PL.return
'they went back, after they went back, ...'
(43) \(t e=m e=p a\),

3PL=PL.return=INSTR
'they went back and then, ...'
(44) te=a=hoe toe.
\(3 \mathrm{PL}=\mathrm{PROM}=\) come.landwards 3.come
'they arrived, ...'
(45) \(T e=r a=h o e\) toe,
\(3 \mathrm{PL}=\mathrm{also}=\) come.landwards 3.come
'that lot came, ...'
(46) \(t e=m e=k o \quad t e=m e=p a\),
\(3 \mathrm{PL}=\mathrm{PL}\). return \(=\mathrm{OBV} 3 \mathrm{PL}=\mathrm{PL}\). return=\(=\mathrm{INSTR}\)
'they went back, and later, they went back and then, ...'
(47) Indonesia hoe te=meng=a ti-ti wi.

Indonesia come.landwards 3.come 3PL=PL.sit=PROM 3PL.do-RED here
'the Indonesians arrived, and they're here now.'

\section*{17 Te bà pílang te ti e húhú}

Linguists (26 secs)
In this text the speaker describes her meetings with the author (classificatorily her son in Skou terms), but then gets distracted into a complaint about how hard it is to make ends meet for an old widow. The title, Te bà pílang te ti e húhú, translates literally as 'a story about the people who make language'.
(1) Nì húhú nì=li-li. 1SG story 1SG=do-RED 'I'm telling a story.'
(2) \(A\),
ah
'Well, ...'
(3) jéng-nì=ne, place-1SG.GEN=1SG.DAT 'at my place, ...'
(4) pá nì=lúe-lúe li. house 1SG=build-RED do 'I built the house.'
(5) Taíngbe \(k e=b a l e ́ n g-n i ̀=n e \quad k e=w a ́ n g=i n g ~ a\), money 3SG.NF=male-1SG.GEN=1SG.DAT 3SG.NF=die=the 'Now money, my husband has died, ...'
(6) \(a \quad n \grave{=}=r a=w o ̀=f a=i n g a\),
ah \(1 \mathrm{SG}=\mathrm{also}=\mathrm{EMPH}=\) only=the
'and there's just me, ...'
(7) nì=lóeng "Pá hápa ketong li" li=ko,

1SG=say house small little do do=OBV
'I said "Make a little house", ...'
(8) \(n \grave{=}=\) moeng \(=\) ing \(a \quad u n g\),
\(1 \mathrm{SG}=\) sit=the now
'and I live in it now, ...'
(9)
\(k e=b a ̀ ~ a n g k u \quad\) ung \(=\) toe \(\quad\),
3SG. NF=person child 3SG.NF=3.come now=INSTR
' my son has come now, ...'
(me - MD)
(10) anake moeng=moeng=ing \(a\),

1DU sit-RED=the
'we've been sitting down together, ...'
(11) \(k e=\operatorname{ing} a=p a \quad\) húhú ne=ti ne-ne.

3SG. NF=the \(=\) INSTR story 1PL=1PL.do 1PL.be-RED
'I talk with him.'
(12) Húhú roro-pa ne=ti ne-ne.
story quiet-INSTR \(1 \mathrm{PL}=1 \mathrm{PL}\). do 1 PL.be-RED
'We just chat quietly.'
(13) Hú- te=angku=ka,
stor- 3PL=child=FOC
'(we tal-) but children, ...'
\(t e=b a ̀=r a \quad\) we \(f i \quad k a\),
3PL=person=also get.F leave.PL NEG
'and other people, they don't leave us (alone), ...'
(what has been transcribed here as we fi seems to be related to wí ta fí 'discard'; the use of wé 'get (feminine object)' is lexicalised, and does not reflect the gender of the object; this is indicated in the vowel alternation on \(f e\) 'put down')
(15) na-nawò toe te=tángpe na nawò toe=ka, RED-many 3.come 3 PL=small.bird(sp.) play many 3.come=FOC 'lots of them come, like little pigeons, lots of them come to play, ...'
(16) pung òe, liver play
'all playful, ...'
\[
\begin{array}{llllll}
T(e)=a ́ n g-p e & n a & \text { nawò } & \text { te=òe } & e & t i,  \tag{17}\\
\text { 3PL=child-3SG.F } & \text { play } & \text { many } & \text { 3PL=play } & \text { 3PL.be } & \text { 3PL.do }
\end{array}
\]
'lots of little girls keep coming around and playing all over the place.'
(18) ing a pí=ra ne=ti-ti hang ka.
the speech=only 1 PL=1PL.do-RED time NEG 'so we just chatted away until we ran out of time.'
(19) \([\overrightarrow{a r}]\),
ahh
‘Ah, ...'
(20) anake pí háháfa ne=ti ne ti 1DU.EX speech slow 1PL=1PL.do 1PL.be 1PL.do
'we'd just sit and talk quietly, ...'
(21) pí=ing a nì=lóeng,
speech=the \(\quad 1 \mathrm{SG}=\) say
"I'd do the talking, ...'
(22) \(k e=m o e \quad t i\),

3SG.NF=return 3SG.NF.go
and then he'd go home, ...'
(23) \(e\),
eh
'um, ...'
(24) e ké=ing ke=lóeng-lóeng \(=p a\),
eh 3SG.NF.GEN=DEIC 3SG.NF=say-RED=INSTR
'ah, he wanted to talk, and , ...'
(25) taingbe ung ke=we núng nì.
money now 3SG.NF=get.F give 1 SG
'now he's given me some money.'
pá-nì=ne hapa=a \(\quad\) pí=a nì=li-li li.
house-1SG.GEN=1SG.DAT small=PROM speech=PROM
1SG=do-RED do
'I want to talk about how my house is too small.'
(27) Pí=a húhú pí=a nì=a [价í=a
speech=PROM story speech=PROM 1 SG=PROM speech=PROM
húhú nì=li.
story \(1 \mathrm{SG}=\) do
'I want to have my say, I want to tell about it.'
(28) \(K a \quad u n g=p a\),

NEG now=INSTR
'Just recently, ...'
(29) \(k[\mathrm{~B}]=\) ing \(=\) we \(=\) ing \([\sharp]\),

3SG.NF=DEIC=this=DEIC
'here, ...'
te=táng=we a hóe toe=ing,
3PL=bird=this come.landward 3.come=DEIC
'the Indonesians have come, ...'
(31) te=táng-bà hoe toe,

3PL=bird-person come.landwards 3.come
the Indonesians arrived, ...'
(32)
ne \(=\) toe - toe \(=p a\),
\(1 \mathrm{PL}=3\).come-RED=INSTR
'we came along, ...'
(a clear speech error here, with \(n e=1\) PL instead of \(t e=3\) PL as the verbal clitic)
(33) ya héfèng=ra te=ti \(k a\),
thing good=also 3PL=3PL.do NEG
'they don't do anything worthwhile, ...'
(34) Taingbe nawò.
money many
'though they've got lots of money.'
(35) \([\varepsilon] \quad\) fi,
‘[...]'
(This is probably a false start.)
(36) te=ing,

3PL=DEIC
'them, ...'
(37) \(t e=r a=w o ̀\),

3PL=only=EMPH
'that lot, ...'
(38) [pas ya],
[exactly yes]
'yes, those ones, ...'
(39) \(t e=r-i=p a\)
\(y a\),
3 PL=3PL-get.PL=INSTR thing
'they took it all, and, whatsit, ...'
\begin{tabular}{llll}
\(t e=t-a n g\) & \(e\) & \(t i=p a\) & \(t e=t i\) \\
3PL=3PL-eat & 3PL.be & 3PL.do=INSTR & 3PL=3PL.do
\end{tabular}\(\quad\) 3PL.be
(41) ne=ing lúto=fa ue fí e ti \(k a\)
1PL=DEIC person-Papuan=INSTR=this eye=only old meet 3PL.be 3PL.do NEG
ma ko me meng ne pé ne le.
xxxxx be.at 3PL.return 3PL.sit xxxxx
'we Papuans, we're tired of what we see,
(42) \(\quad\) Ana=ra te=baléng \(=p a \quad y a-n o \quad t e=r-i ́\)
like=only 3 PL=man=INSTR thing-work 3PL=3PL-PL.get.PL
\(e \quad t i \quad\) taíng te=r-í \(\quad e \quad t i\). 3PL.be 3PL.do money 3PL=3PL-PL.get.PL 3PL.be 3PL.do 'That's how the men do work, and get some money.'
(43)
\begin{tabular}{|c|c|c|c|c|}
\hline \(N e=b a ̀\) & ró-ró & \(n e=a\) & [ \(\ddagger \mathrm{i}]=a \quad m\) & moeng \\
\hline 1PL=person & empty-RED & 1PL=PROM & even=PROM & sit \\
\hline \[
\begin{aligned}
& t e=t i=i n g ~ a, \\
& \text { 3PL=3PL.da }
\end{aligned}
\] & =the & & & \\
\hline
\end{tabular}
(44)
```

ung a=we ke=bà angku toe=ing
now=this 3SG.NF=person child 3.come=DEIC
ara nì ya ke=loe léng.
like 1SG thing 3SG.NF=get.PL give
'now the children come, and I get things that they give (to me).'

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\section*{18 Te Táng}

\section*{Indonesian colonisation (1 min. 31 secs.)}

The take-over of what was then Nederlands Nieuw-Guinea by the Indonesian armed forces in 1961/1962 marked a sharp break between the Dutch colonial times, which had been relatively non-interventionist at the village level, and the modern Indonesian era, which has had a large impact on the life of most people in Skou and beyond. Textually this narration shows less organised narrative structure than the others, since it is essentially a set of recollections and not a more formal story - see line (35), in which the speaker clearly starts on a new train of thought.
(1) Bàme,
village
'The village, ...'
(2) bàme-nè=ne,
village-1PL. GEN=1PL.DAT
'our village, ...'
(3) pí=a húhú nì=li-li li.
speech=PROM story 1SG=do-RED do
'I'm going to tell a story about it.'
(4) \(A\),
ah
‘Ah, ...’
(5) lópa,
earlier
'before, ...'
(6) \(f a ́=p a\),
sago.ribs=INSTR
'sago ribs, and, ...'
(7) \(b i ́=p a\),
flooring=INSTR
'(plants for) flooring, and, ...'
(8) hó=we a pá=we a te=ti e.
roof=this house=this 3PL=3PL.do 3PL.be
'these (plants for) roofing, we'd make houses like this.'
(9) \(N e=r a=w o ̀=f a \quad n e=b a ̀-m o e \quad n e=r a=w o ̀=f a\),

1PL=also=EMPH=only \(1 \mathrm{PL}=\) person-Papua \(\quad 1 \mathrm{PL}=\) also=EMPH=only
'Us, us Papuan people, we, ...'
(10) moeng=ing \(a\),
sit=the
‘our life, ...'
(11) pá=ing \(a \quad t e=t i \quad e=i n g a \quad y a-l i l i p a=i n g \quad p a ̀\), house=the 3 PL=3PL.do 3PL.be=the thing-all.things=DEIC complete 'we'd make our houses, and everything we needed was there, ...'
(12) hòe,
sago
'sago, ...'
(13) hángpeng hòe \(=r a\),
bush sago=also
'wild sago, ...'
(14) nawò.
many
'there was lots of it.'
(15) [me]

Mmm
'I mean, ...'
(16) \(r^{\prime}=r a \quad y a=i n g \quad n a w o ̀ . ~\)
tree=also thing=DEIC many
'trees and stuff, there were lots of them.'
(17) Ung \(a=\) we te=táng=we a hoe toe=ing \(a\), now=this 3 PL=bird=this go.landward 3.come=the
'Now, with the Indonesians here, ...'
(18) rípa \(y a=w e \quad t e=p a n g=k o \quad k a\).
tree-stands thing=this 3 PL=chop.PL=OBV NEG
'they've chopped all the trees down until there aren't any left.'
(19) \(B i ́=r a \quad t e=p a n g=k o \quad k a\),
flooring=also 3PL=chop.PL=OBV NEG
'The trees we use for flooring, too, they've chopped them all down, ...'
(20) hòe=wò=ra, te=pang=ko ka,
sago=EMPH=also 3 PL=chop. PL=OBV NEG
'and even the sago stands, they're all gone, ...'
(21) \(a m e ̀\),
uh 2 SG
'and you, ...'
(22) bàme=fue pá te=ti te,
village \(=\) that house 3PL=3PL.do 3SG.F.go
'in the village they still need to make houses, ...'
(23) \(y a=k o \quad h o ́=w e ~ k a\),
thing \(=O B V\) roof=this NEG
'and, whatsit, there's no roof materials, ...'
(24) te=Táng hó-tè=we =pí=a te,

3PL=bird roof-3PL.GEN=this=even=PROM 3PL
'so with the Indonesians, even for these (corrugated iron) roofs of theirs, they, ...'
(25) te=wá e ti-ti=pa,

3PL=request 3PL.be 3PL.do-RED=INSTR
'ask them for something, and ...'
(26) \(\quad o \quad[353]=f a \quad\) te \(=r\)-e \(\quad n\)-ing \(e \quad\) ti-ti=ing \(a\),
little.bit=only 3PL=3PL-get.PL 3PL-give 3PL.be 3PL.do-RED=the 'well they just give us some, they would, ...'
(27) te=bà \(a n a=r a \quad t e=b a l e ́ n g=p a=i n g ~ a\),
\(3 \mathrm{PL}=\) person like=also \(3 \mathrm{PL}=\mathrm{man}=\mathrm{INSTR}=\) the 'and (all the) people, the men too, ...'
(28) yano te=r-í \(\quad\) ti=pa ti=ing \(a\),
work 3PL=3PL-PL.get.PL 3PL.be 3PL.do=INSTR 3PL.do=the
'they do some work, like that, ...'
(29) ne=bàro-ro,

1PL=widow-RED
'and us widows, ...'
(30) te=bà ró-ró=ing te=,

3PL=person empty-RED=DEIC 3PL= 'the bereft people, they, ...'

house small thing=DEIC
'just a small house, that sort of thing, ...'
\(y a=f a \quad t e=t i-t i\).
thing \(=\) only \(\quad 3 \mathrm{PL}=3 \mathrm{PL}\). do-RED
'that's all they get.'
(33) \(T e=r a\) taíngbe \(k a\).

3PL=also money NEG
'And they don't have any money either.'
(34) Pí=a húhú nì=li-li li.
speech=PROM story \(1 \mathrm{SG}=\) do-RED do
'I want to talk about this.'
(35) \(N i ̀ ~[b] l o ́ p a=i n g\),

1SG earlier=DEIC
'Now, before, I, ...'
(an unusual appearance of an initial cluster here; the form is usually cited as lópa, and it can only be assumed that the b was present in an archaic form of the language. See line 77 of Tangwato \(I\) for another example of archaic forms being retained.)
\(a\),
ah
'ah, ...'
(37) hó=we ne=ueme ne \(n e=n-e ̀=p a[\mathbf{2}]\) - tone on è xxxxxxx roof=this 1PL=woman 1PL 1PL-1PL-go.east=INSTR
'this (sort of) roofing, we women would go down and -'
(38) ne=ne ti ne ne=n-à moe=pa toe 1PL=1PL.go 1PL.do 1PL.be 1PL=1PL-walk return=INSTR 3.come te=baléng \(\quad t e=y-a ̀=p a\), 3 PL=man \(\quad 3\) PL=3PL-weave=INSTR
'we'd go and collect it, and come back home, and the men would weave it, and, ...'
(39) \(\left[\begin{array}{c}a \\ \hline-1\end{array}\right]\)
'ah, ...'
(40) [a] pá=ing ya-no te=r-í=a=ko, ah house=DEIC thing-work 3PL=3PL-get.PL=PROM=OBV 'ah, they'd do all the work for a house, ...'
(41) bí,
floor
‘floor (materials), ...'
(42) bíta=ra hìng,
flooring=also other
'even the stuff we use for floors is different, ...'
 fú ne bàme. put.down 1PL.go village
'even that, the men would make it and we women would carry it down to the village.'
(44) Pá te \(=r-i=p a\),
house 3PL=3PL-get.PL=INSTR
'they'd get the materials for a house, and, ...'
pá=ing te=ti=pa te,
house \(=\) DEIC 3 PL=3PL.do \(=\) INSTR 3SG.F.go
'they make the house, then, ...'
(46) pá-tó pe=léng wang \(e\).
house-old 3SG.F=become die be
'the traditional houses are dying out.'
(47) \(Y a \quad\) ùng \(a=w e=\) ing,
thing now=this=DEIC
'Whatsit, nowadays, ...'
(48) te=angku te=ra,

3PL=child 3PL=also
'kids, they ...'
(49) bàme nawò te=ti=a [Y]a [kaná],
village many 3 PL \(=3\) PL.do \(=\) PROM NEG because
'there aren't many of them in the village, because, ...'
(50) taíngbe \(=w(i) a \quad\) te=yú ti-ti=ing \(a\) money=this 3PL=search.for 3PL.be 3PL.do-RED=the
te=ti=ing te=pèng. [55 22]
3PL=3PL.go=DEIC 3PL=go.out
'because they look for money, for this they leave the village.'
(51) [a],
ah
‘Ah, ...’
(52) Te=bàhue te=ra,

3 PL=elder \(\quad 3 \mathrm{PL}=\) also
'And the old people, ...'
ya-lílípa=ka té \(=a \quad t[\mathrm{j}] e=t i-t i \quad k a \quad\) bàme,
thing-all.things=FOC 3PL=PROM 3PL=3PL.do-RED NEG village
'they can't do all the things (that are necessary) in the village, ...'
(the double-accent notation on \(t e ́=\) has been used in an ad hoc fashion here to indicate an extremely high pitch on this pronoun, used contrastively. The pitch is about 320 Hz , extremely high for a speakers whose normal range is around 150 \(\mathrm{Hz})\)
(54) \(A\),
ah
'Uhh, ...'
\begin{tabular}{lllll} 
te=bà & ung a & hoe & toe & moe te=ti \\
3PL=person now & come.landwards & 3.come & return & 3PL=3PL.go-RED \\
\(w(i) a \quad\) te= \(a\) & há. & & \\
this \(3 P L=P R O M ~ s t a n d ~\) & & \\
'people nowadays come and go, that's how it is.'
\end{tabular}
(56) Ya-yong=we \(t\) - \(t e=r-i ́=i n g=p a\),
thing-food=this 3PL- 3PL=3PL-get.PL=DEIC=INSTR
'To get food, ...'
(57) yatà te=ti=pa te=t-ang [i]e ti.
transact 3 PL=3PL.do=INSTR 3PL=3PL-eat 3PL.be 3PL.do
'they're selling things and eating from that.'
Pí=a húhú nì=li.
speech=PROM story \(1 \mathrm{SG}=\mathrm{do}\)
'I've told my story.'
(xviii) Bàme nè ne, pí a húhú nì li li li. Lópa, fá pa, bí pa, hó we a pá we te ti e. Ne bàmoe ne ra wò fa, moeng ing a, pá ing a te ti e ing a yalilipa ing pà, hángpeng hòe ra, nawò. Rí ra ya ing nawò. Ung a we te táng we a hoe toe ing a, rí pa ya we te pang ko ka. Bí ra te pang ko ka, hòe wò ra te pang ko ka. Bàme fue pá te ti te ko, hó we ka, te Táng hó tè we pí a te te wá e ti ti pa, ó fa te re ning e ti ti ing a, te bà ana ra te baléng pa ing a, yano te rí e ti pa ti ing a, te bà ró ró ing te, pá hápa ya ing, ya fa te ti ti. Te ra taíngbe ka. Pí a húhú nì li li li. Nì lópa ing, hó we ne ueme ne ne ne pa ne ti ne nà moe pa toe te baléng te yà pa, pá ing yano te rí a ko, pá ing yano te rí a ko, bíta pí ra hìng
te baléng te ti ti pa ne ueme ne na pa fú ne ne bàme

\section*{19 Tangmoe}

Sea canoes (1 min. 40 secs)
The Skou people were, along with their neighbours, known for the unusual and beautiful canoes that they made, and used for voyages across the range of the Skou people's territory, spending up to four days at sea on trips to visit relatives. These canoes are no longer normally made in the Skou area, though, as this story relates, the design is still made to the west in Tanah Merah. The Barupu people in Papua New Guinea, distant relatives of the Skou, also make similar canoes, and a very similar design is also followed in Yapen island, which shows links in the mythology with Skou (see text 20 for one such Skou character who travels to Yapen island).
(1) \(N i ̀ ~ h u ́ h u ́ ~ n i ̀=l i-l i, ~\)

1 SG story \(1 \mathrm{SG}=\) do-RED
'I'm telling a story about, ...'
(2) tang,
canoe
'canoes, ...'
(3) lópa tang tóto ne,
earlier canoe old 1PL
'olden canoes, we used to, ...'
(4) \(y a\),
thing
'whatsit, ...'
(5) [pake] ne=ti ne.
[use] 1PL=1PL.do 1PL.be
'to use them.'
(7) Tang tóto,
canoe old
'olden style canoes, ...'
(8) tangmoe.
canoe.moe
'tangmoe canoes.'
(9) Tang-tè=a tangmoe,
canoe-3PL.GEN=PROM canoe.moe
'Their canoes were (called) tangmoe.'
(10) ung a tang=we toe te=r-e
now canoe=this now come.landwards come 3PL=3PL-get.PL
\(t u \quad t i \quad e \quad t i-t i=w e\),
carry.PL 3PL.do 3PL.be 3PL.do-RED=this
'Now, these canoes have come here (from Indonesia), and they take them, and use them, ...'
(11) tang natí,
canoe new
'new-(fangled) canoes, ...'
(12) motoro te=hí e ti-ti=ing \(a\),
outboard.motor 3PL=go.down 3PL.be 3PL.do-RED=the
'They put outboard motors on them, ...'
(13) fèng.
bad
'it's no good.'
(14) Lópa,
earlier
'In the olden days, ...'
(15) tangmoe te \(=r-e_{\mathrm{L}}\)
canoe.moe 3 PL=3PL-get.PL
'they'd take a tangmoe, ...'
(16) ne=r-oe natí ne=ing,

1PL=1PL-get.PL new 1PL.go=DEIC
'we'd take a new one, and, ..
(17) \(a\),
uh
'uh, ...'
(18) \(t e=t u ́=p a\) te,
3PL=carry.PL=INSTR 3PL.go
'they'd take it, ...'
(19) táng te=r-é y-ang e,
net 3 PL=3PL-get.PL 3PL-cast.net 3PL.be
'they'd go in a canoe and throw out the nets, ...'
(20) moe te=hí,
fish 3PL=go.down
'they put the fish down, ...'
(21) moe te=r-í \(\quad\) e te=hí e tang-tó=fue \(a\).
fish 3PL=3PL-PL.get.PL 3PL.be 3PL=go.down 3PL.be canoefront=that
'they get the fish and put them down in the front of the canoe.'
(22) Ing \(a\),
the
'The, ...'
(23) te=bà te=meng tángkoe=wi a
\(3 \mathrm{PL}=\) person \(3 \mathrm{PL}=\mathrm{PL}\). sit \(\quad\) canoe.platform=this
'the people sit on the platform in the canoe, ...'
(24) Móe=ing=pí
fish=DEIC=even
'and even the fish, ...'
te=hí tang-tó=fa,
3PL=go.down 3PL.be canoe-front=only
'they put them down just at the front of the canoe, ...'
(26) [nanti] te=tu me=ko toe bàme,
[later] 3PL=carry.PL PL.return=OBV 3.come village
'that's how they'd take them back to the villagers, ...'
xxxxx te tu me ko tue bame?
pá-...,
house
'(at the) houses, ...'
(28) pá-loeng i,
house-platform LOC
'(putting them) on the house platforms, ...'
(29) móe \(=\) ing te \(=r-i ́\),
fish=DEIC 3PL=3PL-get.PL
'the'd take the fish, ...'
(30) á ne=r-óe t-éng=pa te=r-í hí,
rope \(1 \mathrm{PL}=1 \mathrm{PL}-\) get.PL \(1 \mathrm{PL}-‘\) give' \(=\mathrm{INSTR} \quad 3 \mathrm{PL}=3 \mathrm{PL}-\mathrm{PL}\). get.PL go.down
'they catch the fish with lines, and get them, ...'
(the expected 1PL of 'give' is reng, not teng. There is no explanation for this irregular inflection)
ne=r-oe langyu ne pá [j]i.
1PL=1PL-get.PL together 1PL.be house go.down
'we put them down with us in the house (front part of the boat).'
(32) \((K) e=i n g \quad\) tangmoe.

3SG.NF=DEIC canoe.moe
'That's a tangmoe.'
(33) \(A\) ung \(a=w e\),
uh now=this
'But now, ...'
(34) tang ung a te=te-te=we tang na[3]í,
canoe now 3 PL=3PL.do-RED=this canoe new
the canoes that they use now are new style canoes, ...'

canoe lepalepa=the
'an Indonesian-style canoe, ...'
(36) \(n e\),

1PL
'we, uh, ...'
(37) fèng.
bad
'it's no good.'
(38) [Kalo] tangmoe \(=\operatorname{ing} a\),
[if/TOP] canoe.moe=the
'Now tangmoe canoes, ...'
(Papuan Malay kalo, related to Standard Indonesian kalau 'if', is a topic marker in many varieties of Malay in eastern Indonesia)
(39) fèng=ra [fende] \(k a\).
bad=only NEG
'there're not bad at all.'
(40) Ya ne=hí móe tangkoe=pa ke ne=bà
thing \(1 \mathrm{PL}=\) go.down fish canoe.platform \(=\mathrm{INSTR}\) 3SG.NF \(1 \mathrm{PL}=\) person ne=тое-тое, 1PL=return-RED
'So we put the fish down on the platform in the canoe, and they h- all of us, we go home, ...'
(41) tang,
canoe
'in the canoe, ...'
(42) nà ne=n-u ne ne te=bà hìngtung paddle 1PL=1PL-paddle 1PL.go 1PL.be 3PL=person two te=meng-meng tang tóto, 3 PL=PL.sit-RED canoe front
'we paddle, and two people sit in the front of the canoe, ...'
\begin{tabular}{llll} 
te=bà & hìngtung & meng-meng & tangrúe=pa \\
3PL=person & two & PL.sit-RED & stern=INSTR
\end{tabular} ná ne=n-u ne. paddle \(1 \mathrm{PL}=1 \mathrm{PL}-\) paddle 1PL.go 'and two people sit in the back of the canoe, and we paddle along.'

\footnotetext{
\(A\) rángpáng tang te \(=h o e=k o e\) ráng te \(=y\)-á uh night canoe 3PL=go.landwards=OBV return sun 3PL=3PL-walk \(e \quad t i-t i=p a=r a\), 3PL.be 3PL.do-RED=INSTR=also 'at dusk the canoe turns back landward, and in the morning they go off again, ...'
}
(45)
\[
\begin{aligned}
& \begin{array}{lll}
\text { te=bà } & \text { hìng-hìng=fa } & t e=k[\text { ï̀ }]
\end{array} t \begin{array}{ll}
t e=b a ̀ ~ u n g ~ t a n g r u ́ e ~
\end{array} \\
& \text { rudder } \\
& \text { li-li=pa ke=bà ung. } \\
& \text { do-RED=INSTR 3SG.NF=person now } \\
& \text { 'they look for other people, and then they steer, these people, ...' }
\end{aligned}
\]
(Here the speaker says [kiiu] for karéng 'they look for')
(46) Tang-[l]úe ke=wí=ko ke=moe ke=ing moe canoe-rudder 3SG.NF=get.F=OBV 3SG.NF=return 3SG.NF=DEIC return tòf \(o=r a=f a \quad\) móe \(k e=j i ́=p a\)
fishing.grounds=also=only fish 3SG.NF=hit.PL=INSTR
\(k e=h i ̀ \quad\) tang-tò=fa.
3SG.NF=go.down canoe-prow=only
'he takes the rudder, and goes back, he goes back to the fishing grounds and catches lots of fish, and puts them in the prow of the canoe, ...'
(47) Tang=ing \(i=p a \quad y a-y a=w e=i n g \quad p e=m o n g-m o n g\) tang, canoe=DEIC be.at=INSTR thing-RED=this=DEIC 3SG.F=sit.F-RED canoe 'the canoe stays there, and everything (all the fish)'s (put) in the canoe, ...'
(48) peng ró=fa.
clean skin=USE
'and (we) scale them.'
(49) Ing a héfèng,
the good
'That's good, ...'
(50) móe rí,
fish spine
'and the fish spines, ...'
(51) \(=p a, \quad\left(\left[\mathrm{k}^{\mathrm{ma}}\right]\right)\),
\(=\) INSTR
'they'd, ...'
(52) \(k u\),
stab
'poking you, ...'
(53) tánge \(k u \quad k a\).
leg poke NEG
'They wouldn't stab you in the leg.'
(54) \(T e=m e ~ h u ́ e f a=p a \quad t e=t o e=p a\),

3 PL \(=\) PL.sit \(\quad\) old \(=\) INSTR \(\quad 3\) PL=3.come \(=\) INSTR
'They just sit there for a while, and then come, ...'
(55) pá-loeng.
house-platform
'to the platform.'
(56)
\[
\begin{aligned}
& \text { Pí=a hú=ing a ung } a=\text { we, } \\
& \text { speech=PROM } \begin{array}{l}
\text { story=the now=this } \\
\text { sen } \\
\text { Now this talk, the things I've been saying now, ...' }
\end{array},
\end{aligned}
\]
(57) bàme Te Lóngpa=pa Te Pa=pa Te Ménglong=we ka.
village Enggros=INSTR Tobati=INSTR Kayu Pulau=this NEG
'in the villages, in Enggros, Tobati, and Kayu Pulau here, they don't have them.'
(58) Tang=ing,
canoe=DEIC
'Those canoes, ...'
(59) tang tang=ing \(a\),
canoe canoe=the
'canoes, those canoes, ...'
(60) tangmoe te=ti ka.
canoe.moe 3PL=3PL.do NEG
'they don't make the tangmoe canoes.'
(61) \(A\),
uh
'Uh, ...'
(62) mong tue-tue Te Lúng=pa,
sit.F 3SG.F.do-RED Ormu=INSTR
'no they're (canoes) at Ormu, and ...'
(63) Te Lángfa,

Tanah Merah
'at Tanah Merah, ...'
(64) \(T e\) tang,

3PL canoe
'they (make) canoes, ...'
(65) Te Láng=fue \(a=\) ing \(a\). [七セ1Z̈fyijiz]

Tanah Merah=that=the
'that lot over in Tanah Merah, ...'
(66) Tangmoe \(=\) ing \(t e=t i \quad e \quad t i-t i\).
canoe.moe=DEIC 3PL=3PL.do 3PL.be 3PL.do-RED
'they still make tangmoe.'
(67) Yatà te=ti e ti-ti Lángfa.
transact 3PL=3pL.do 3PL.be 3PL.do-RED Tanah Merah
'They sell them in Tanah Merah.'
(68) \(P i ́=a \quad h u ́ h u ́ ~ n i ̀=l i . ~\)
speech=PROM story 1 SG=do
'I've told the story.'
(xix) Nì húhú nì li li, tang, lópa tang tóto ne, ya, ne ti ne. Ne roe hí ne. Tang tóto, tangmoe. Tang tè a tangmoe, ung a tang we ung a hoe toe te re tu ti e ti ti we, tang natí, motoro te hí e ti ti ing a, fèng. Lópa, tangmoe te re, ne roe natí ne ing, a, te tú pa te, tang te ré yang e, moe te hí, moe te rí e te hí e tang tó fue a. Ing a, te bà te meng tángkoe wi a Móe ing pí te hí e tang tó fa, ana ing te tu me ko toe bàme bà, pá loeng i, móe ing te rí pa á ne róe téng pa móe ing te rí hí, ne roe langyu ne ne pá i. Ke ing tangmoe. A ung a we, tang ung a te te te we tang nasí, tang lepalepa ing \(a\),
ne, fèng. tangmoe ing a, fèng ra ka. Ya ne hí móe tangkoe pa ke ne bà ne moe moe, tang, nà ne nu ne ne te bà hìngtung te meng meng tang tóto, te bà hìngtung meng meng tangrúe pa ná ne nu ne. A rángpáng tang te hoe ko móe ráng te yá e ti ti pa ra, te bà hìng hìng fa te kung te bà ung tangrúe li li pa ke bà ung. Tang lúe ke wí ko ke moe ke ing moe tòfo ra fa móe ke jí pa ke hì tang tò fa. Tang ing i pa ya ya we ing pe mong mong tang, poeng ró fa. Ing a héfèng, móe rí, pa, , ku, tánge ku ka. Te me húefa pa te toe pa, pá loeng. Pí a hú ing a ung a we, bàme Te Lóngpa pa Te Pa pa Te Ménglong we ka. Tang ing, tang tang ing a, tangmoe te ti ka. A, ung a mong tue tue Te Lúng pa, Te Lángfa, Te Láng fue a ing a. Tangmoe ing te ti e ti ti. Yatà te ti e ti ti Lángfa. Pí a húhú nì li.

\section*{20 Tangí / Tangwà}

Tang I TangwÀ (5 mins 55 secs)
The following traditional story accounts for the lack in the Skou area of trees that have the seeds necessary to make good beads, and the prohibition on members of the Mallo clan from eating genemon (tulip). Although the main character is initially named as Tangwà, partway into the narration the speaker remembers that he was a character in another story, and the correct name is Tangí. In keeping with the general minimal editing of the texts presented here the original names have been left in, and not altered, though the reader should be aware that both Tangwà and Tangí are used here to refer to the same individual.

This text is sometimes spoken at a very fast rate, reaching rates of about one syllable every 10 cs , making for some unusual realisations of some of the phonemes. These have been noted where they occur.
(1) Tangwà húhú-ké nì=li.

Tangwà story-3SG.NF.GEN 1SG=do
'I'm telling the story of Tangwà.'
(2) Tangwà \(k e=\),

Tangwà 3SG.NF
'Tangwà, ...'
(3) [Bisa ..., bisa...?]
[can can]
'Can, can I ...?'
(4) \(-\{Y a b i s a\).
[yes can]
'Yes, you can.'
(The speaker is checking to see if it's alright to use Skou, rather than Malay)
```

[bokenaze]
??
(unknown)

```
(6) Tangwà \(k e=\),

Tangwà 3SG.NF.ERG
'Tangwà, ...'
(7) \(a h, \ldots\)
uh
'ah, ...
(8) \([\) [ \(] e=k-a=p\left[{ }^{\mathrm{W}}\right] a \quad\) táng \(k e=j \dot{l}_{\mathrm{L}}=p\left[{ }^{\mathrm{W}}\right] a\),

3SG.NF=3SG.NF-walk=INSTR bird 3SG.NF=hit.PL=INSTR
'he went and killed lots of birds, and ...'
(9) \(\mathrm{ke}[\mathfrak{r}] \grave{e} e[\mathfrak{F}] i=i n g\) ke=loe=pa ke=loe ká

3SG.NF head=DEIC 3SG.NF=get.PL=INSTR 3SG.NF=get.PL carry moe [m]pá toe, return house 3.come 'he took their heads, and took them back to the house, ...'
(the sentences in (9) together are only 1.2 seconds in duration; this indicates an average tempo of less than 0.1 seconds per syllable)
(10) \(k e=\) loe [r]ue ing [pi],

3SG.NF=get.PL there LOC
'he took them to the, ...'
(11) \(a h, \quad p a ̀\).
uh cult.house
'...um, cult house.'
(12) \(P a ̀=p a\),
cult.house=INSTR
'To the cult house, yes, ...'
(13) \(k e=\) rapue,

3SG.NF=descend
'he went down there, ...'
(14) \(k e=t i \quad k-a=p a\),

3SG.NF=3SG.NF.go 3SG.NF-walk=INSTR
'he went off again, and, ...'
(15) hìng
other
'others, ...'
(16) táng
bird
‘birds, ...'

(this line starts with what is realised as a geminate stop, [kr], 0.11 seconds long, due to the deletion of the vowel of the proclitic in the fast-speech tempo: 18 syllables in 3.1 seconds)
(18) pìng [ \(\because]\),
bow
'[his] bow, ...'
(19) ping te=te te=we fí táng,
bow 3PL=3PL.do 3PL=leave bird
'they left it with the birds, ...'
(20) \(p a ̀=i n g a\).
cult.house=the
'in the cult house.'
(21) Ing a te=ueme hìngtung Tóe tena Háue, the \(3 \mathrm{PL}=\) woman two Tóe 3DU/GDR Háue 'And because of that the two women, Tóe and Háue, ...'
(22) \(t e n a=p i ́=a\),

3DU/GDR=even=PROM
'those two, ...'
(23) \(t e=t e\),

3PL=3PL.go
'they went, ...'
(24) tilong te=nà pe=jı́ toe,
doorway 3PL=open 3SG.F=open 3.come
'and they opened the door, ...'
(25) te=bà táng-te

3PL=person bird-3PL.GEN
'the bird clan's door, ...'
(here the HL melody associated with the genitive suffix -tè has spread over the preceding syllable and the syllable containing the genitive suffix)
(26) táng=ing,
bird=DEIC
'and those birds, ...'
(27) te te=bíng fátà,

3PL 3PL=kill all
'they killed them all, ...'
(28) Tangí ke=moe toe,

Tangí 3SG.NF=return 3.come
'Tangí came back home, ...'
(29) táng=ing te=bíng fátà,
bird=DEIC 3 PL=die.PL all
'and all of the birds were dead, ...'
(30) \(k e=f e-f e=p a\),

3SG.NF=see.PL-RED=INSTR
'so he saw them and, ...'
\begin{tabular}{|c|c|c|c|}
\hline \(k[\mathrm{e}]=\) ing \(=p a\) & \(y a\) & \(k e=t o ́ e p i=p a\) & \(k e=m o e=k o\) \\
\hline \multicolumn{4}{|l|}{3SG.NF=DEIC=INSTR thing 3SG.NF=prepare=INSTR 3SG.NF=return=OBV} \\
\hline \(t i \quad k e=l i\), & & & \\
\hline 3SG.NF.go 3SG.N & =do & & \\
\hline 'He got his things to & ethe & nd then left to return hond & \\
\hline
\end{tabular}
```

tóe-ya ne=n-a ne=ti-ti=we
beads-thing 1PL=1PL-walk 1PL=1PL.do-RED=this
ke=ra=rúe wa kí=fa.
3SG.NF=also=stand plant 3PL.dig=only
'he left with the beads, but he also just buried some.'

```
(beginning with this line the speaker shows considerable variance in subject agreement. This line shows 1PL forms used for 3SG.NF, and also 3PL forms for a 3SG.NF subject. These errors reveal a tired narrator.)
(33) Tangwáto wa=ing \(a\).

Tangwato cave=the
'In a cave in Tangwato.'
(34) Ing \(a\),
the
'Well, ...'
(35) ke=rúe wa ti=fa=ing,

3SG.NF=stand plant 3SG.NF.go=only=DEIC
'after he stayed and buried some along the way, ...'
(36) \(k e=m o e\),

3SG.NF=return
'he returned, ...'
(37) táng=ing te=bìng.
bird=DEIC \(\quad\) 3PL=die
'and those birds were dead.'
(38) Loeng \(=p a\),
road/finish=INSTR
'At the end, ...'
(39) \(y a \quad k e=t o ́ e p i=p a\),
thing 3SG.NF=prepare=INSTR
'he got his things ready, ...'
(40) ke=loe \(k\)-á moe ti, 3SG.NF=get.PL 3SG.NF-walk return 3SG.NF.go 'and he took them with him, ...'
(41) túe,
beads
'and the beads, ...'
(42) túe-túe=ing=ra [trtifindre],
beads-RED=DEIC=also
'all the beads, ...'
(43) \(k e=y\)-úe,

3SG.NF=3PL-trample
'he trampled them, ...'
(44) \(k e=y-u ́ e=k o\),

3SG.NF=3PL-trample=OBV
'he trampled them and then, ...'
(45) hang-ling-pè=pe=ra ke=k-a=ko,
roots=3SG.F.GEN=3SG.F.DAT=also 3SG.NF=3SG.NF-carry=OBV
'he even carried the roots, ...'
(46) \(k e=l o e ~ t a n g=f a ~ k e=m o e . ~\)

3SG.NF=get.PL go.down canoe=only 3SG.NF=return
'he put them in the canoe, and he went back.'
(47) \(K e=m o e\),

3SG.NF=return
'He went back, ...'
(48) \(j a ́=f a\),
sea=only
'just by sea, ...'
(49) \(k e=m o e=k o \quad m o e=k o \quad m o e=k o=r a \quad t i\),

3SG.NF=return=OBV return=OBV return=OBV=also 3SG.NF.go
'he went home, then he went back, he returned, ...'
(50) \(k e=t i\),

3SG.NF=3SG.NF.go
'he went, ...'
(51) Serui pí-pong=fue a \(k e=t i=r a\),

Serui mountain-cape=that 3SG.NF=3SG.NF.go=also
'to the cape at Yapen island, he just went, ...'
\(\begin{array}{lll}k e=p i=k o=r a & k e=t i=k o=r a & k e=p-o e \\ \text { 3SG.NF=even=OBV=also } & \text { 3SG.NF=3SG.NF.go=OBV=also } & \text { 3SG.NF=2SG-get.PL }\end{array}\)
ti lowóng=fue a,
3SG.NF.go west=that
'He even, also, he also went, he took them to the west there, ...'
(53) ke=moe ti tóe=we \(k e=k a ́ ~ m o e ~\)

3SG.NF=return 3SG.NF.go beads=this 3SG.NF=carry return \(t i\),
3SG.NF.go
'he wentback, and he took those beads back with him, ...'
(54) tóe ke=wá fue \(a\),
beads 3SG.NF=bury there
'he buried the beads over there, ...'
(55) \(=k o \quad m-a \quad t i \quad k e=w a ́\) fue \(a\),
=OBV 2SG-walk 3SG.NF.go 3SG.NF=plant that
'and he went and buried them over there, ...'
(56) ne ke=we ung \(a=w e\) tóe ne=yú

1PL 3SG.NF=get.F now=this bead 1PL=search
\(t a=p a \quad p i\).
covetous=INSTR mountain 'he took (them) from us and now we search the mountain greedily.'
(57) Tóe ke lé(ng)=ko ke=loe \(k\)-á moe,
beads get give=OBV 3SG.NF=get.PL 3SG.NF-carry return
'He brought (us) the beads and then he took them back with him, ...'
(58) \(p a\),
house
'to his home, ...'
(59) wa=ing bí hang bí=fa mong tue-tue.
cave=DEIC floor coconut floor=only sit.F 3SG.F.do-RED
'in the cave, on the floor, (all) there is on the floor is coconuts.'
(60) Hang rong=fa ke=loe fu mong tue wá=ing \(a\),
coconut old=only 3SG.NF=get.PL put.down.PL sit.F 3SG.F.do cave=the
'He put down lots of old coconuts in the cave, ...'
(61) Tangwáto pí-pong=fue \(a\).

Tangwato mountain-cape=that
'at Tangwato point there.'
(62) Pí=a húhú nì=li i li.
speech=PROM story \(1 \mathrm{SG}=\) do be do
'I'm telling the story.'
(63) Ya nì,
thing 1SG
'So, whatsit, I, ...'
(64) \(n e=b a ̀\),

1 PL=person
'all of us, ...'
(65) \(k u\) [Patipeme] \(n e\),
child [Patipeme] 1PL
'us Patipeme clan descendants, ...'
(66) ápólè-ha ne=n-ang ka.
tulip-leaf 1PL=1PL-eat NEG
'we can't eat tulip leaves.'
Ne=n-ang=pa kóeng lè e tue.
1PL=1PL-eat=INSTR tooth break 3PL.be 3PL.do
'If we eat them, then our teeth will break.'
(68) [ke'no ya-lilipa fátà=ko ke=lóe \(=\) lóe \(k o\)
?? things-all.things 3SG.NF=get.PL all=OBV 3SG.NF=get.PL=OBV
\(k e=l o ́ e \quad k-a \quad m[\varepsilon]\) fátà,
3SG.NF=get.PL 3SG.NF-walk return all
'He got all the different things, all the things, he got them, and took them all back, ...’
(69) ke=kúe \(k-a\) moe.

3SG.NF=dig 3SG.NF-walk return
'he buried them, and then went home.'
(70)

Pi=a=ing \(a \quad n e\),
speech=PROM=the 1 PL
'And the story is that we, ...'
(71) \(n e=b a ̀\) [Patipeme] \(k u=i n g \quad n a=i n g \quad k a\).

1PL=person [Patipeme] child=DEIC thing=DEIC 1PL=1PL-eat NEG
'we Patipeme descendants, we can't eat it.'
(72) Te=ueme hingtung=ing te=a,
\(3 \mathrm{PL}=\) woman two=DEIC 3 PL=PROM
'And those two women, ...'
(73) \(a\),
uh
'uh, ...'
```

te=ra=wò te=me te te=meng pa-rong
3PL=also=EMPH 3PL=PL.return 3PL 3PL=PL.sit river-bank
fue te=ti e.
cry 3PL=3PL.do 3PL.be
'they returned, and sat on the bank of a river and cried.'

```
(75) Ya-lilipa ke=loe ma moe,
thing-all.things 3SG.NF=get.PL NEG return
'He took all sorts of things back (so there aren't any more.'
(76) ne ung \(a=p i\) túe ya-lilipa \(k a\).

1PL now=even beads thing-all.things NEG
'and us, even now, we don't have beads and things like that (on our traditional land).'

Tóe \(=p a \quad y a\)-lilipa \(k a \quad m e\),
beads=INSTR thing-all.things NEG PL.return
'The beads, those things aren't (here) any more, they've gone back, ...'
(78) tóe \(=p a\) héfèng ke=loe \(k a\) moe.
beads \(=\) INSTR good 3 SG.NF=get.PL NEG return
'and the beads, the good ones, he took them all (so there aren't any more when he) went back.'
(79) Ke=loe ke=loe ka moe \(=p a \quad\) ma

3SG.NF=get.PL dye-body=INSTR 3SG.NF=get.PL NEG return
'He took many things, the dye we use for body decoration, too, he took it back with him.'
(80) Pí=a húhú nì=li.
speech=PROM story \(1 \mathrm{SG}=\) do
'I have told the story.'
(xx) Tangí húhú ké nì li. Tangí ke ka pa táng ke jí pa, ke ròebi ing ke loe pa ke loe ká moe pá toe, ke loe fue ing, pà. Pà pa, ke rapue, ke ti ka pa, hìng táng ke ká pa táng hìng ke yú i li pa, pà ing ke táng te ra wò fa, pìng, pìng te te te we fí táng, pà ing \(a\). Ing a te ueme hìngtung Tóe tena Háue, tena pí a, te te, tilong te nà pe jí toe, te bà
táng te táng ing, te te bíng fátà, Tangí ke moe toe, táng ing te bíng fátà, ke fe fe pa, ke ing pa ya ke tóepi pa ke moe ko ti ke li, tóe ya ne na ne ti ti we ke ra rúe wa kúe fa. Tangwáto wa ing a. Ing a, ke rúe wa ti fa ing, ke moe, táng ing te bìng. Loeng pa, ya ke tóepi pa, ke loe ká moe ti, túe, túe túe ing ra, ke kúe, ke kúe ko, hang ling pè pe ra ke ka ko, ke loe hì tang fa ke moe. Ke moe, já fa, ke moe ko moe ko moe ko ra ti, ke ti, Serui pí pong fue a ke ti ra, ke pi ko ra ke ti ko ra ke loe ti lowóng fue a, ke moe ti tóe we ke ká moe ti, tóe ke wá fue a, ko ka ti ke wá fue a, ne ke we ung a we tóe ne yú ta pa pì. Tóe ke léng ko ke loe ká moe pa, wa ing bí hang bí fa mong tue tue. Hang rong fa ke loe fu mong tue wá ing \(a\), Tangwáto pí pong fue a. Pía húhú nì li i li. Ya nì, ne bà, ku Póeme ne, ápólèha ne nang ka. Ne nang pa kóeng lè e tue. ya lilipa ke lóe fátà ko ke lóe ko ke lóe ka moe fátà, ke kúe ka moe. Pi a ing a ne, ne bà Póeme ku ing ya ing ne nang ka. Te ueme hìngtung ing te a, te ra wò te me te te meng pa rong fue te ti e. Ya lilipa ke loe ka moe, ne ung a pi túe ya lilipa ka. Tóe pa ya lilipa ka me, tóe pa héfèng ke loe ka moe. Ke loe li nòe pa ke loe ka moe. Pí a húhú nì li.

\section*{21 Ke bàti}

Evil spirits (25 secs)
There are many kinds of supernatural beings in Skou cosmology. This short text presents a short description of one kind of spirit that is no longer so frequently encountered in the Skou area. Additionally, this text, and the two following, are examples of Skou speakers' notion of defining concepts.
\(K e=b a ̀ t i=f a=[i t u]\),
3SG. NF=spirits=only=[that]
'Evil spirits, ...'
(2) \(K e=b a ̀ t i=f a=i n g\),

3SG.NF=spirits=only=DEIC
'Evil spirits, ...'
['kan] \(k e=b a ̀\),
[not] 3SG.NF=person
'They're not people, ...'
(4) ke anara féng=ing \(a\),

3SG.NF like wind=the 'they're like the wind, ...'
(5) féng \(k a=k o\) toe. wind hit=OBV 3SG.NF.come 'the wind that blows up to you.'
(6) Anara féng toe,
like wind 3SG.NF.come
'Like a wind coming, ...'
(7) mè=bà moeng pe-pe ung=pa,
\(2 \mathrm{SG}=\) person sit outside-RED now=INSTR
'you'll be sitting down outside, ...'
(8) ke mè nòe=ing \(a=p a\),

3SG.NF 2SG body=the=INSTR
'and he'll ...'
(9) pí \(k e=l i\),
curse 3SG.NF=do
'curse you,...'
(10) ke=bà nòe \(\grave{e}=r a \quad k e=l o e=k o \quad h e ́ f e ́ n g ~\) 3SG.NF=person body cook=also 3SG.NF=come=OBV good fòng tue.
recover 3SG.F.do
'he'll send a fever into your body, but it'll recover.'
(11) \(Y a \quad k e=l i=k o \quad h e ́ f e ̀ n g, ~\) thing 3SG. NF=do good 'He can do good things, ...'
(12) Lópa tue \(a=\operatorname{ing} a\), earlier 3SG.F.do \(\mathrm{PROM}=\) the 'this was in the past, ...'
(13) ung \(a=w e\) [percaya] ne=ti ka \(k\), now=this 3SG.NF=person=DEIC [believe] 1PL=1PL.do NEG 'now we don't believe in his sort, ...'
(14) Pí ne=t-oeng ka.
belief 1PL=1PL-say NEG 'we don't believe in him.'
(15) \(K e \quad\) [nanti] rá e li, pí ne=t-oeng ka. 3SG.NF [later] fire burn do belief 1PL=1PL-say NEG 'He'll burn (in hell) later, we don't believe in them.'
(the 1PL form of 'say' is normally róeng; the \(t\) - here is irregular, reflecting a temporary transfer of the verb to a different \(l\)-class inflectional group [see appendix 2])
(xxi) Ke bàtifa ing, ke bà ka, ke anara féng ka ko toe ing a. Anara féng toe, mè bà moeng pe pe ung pa, ke mè nòe ing a pa, pí ke li, ke bà nòe è ra ke loe ko héfèng fòng tue. Ya ke li ko héfèng. Lópa tue a ing \(a\), ung a we ke bà ing, pí ne toeng ka. Ke rá e li li, pí ne toeng \(k a\).

\section*{22 Tangwáue}

Bush turkeys (35 secs)

Bush turkey eggs are an important source of protein in the diet of many lowland, non-riverine New Guinea peoples, and the Skou are no exception. At the right time of the year (OctoberDecember) many people search in their families bush areas to collect the eggs from underneath the mounds in which they are laid by the adult birds. This text describes the bush turkey's laying her eggs, and the human's collection of them.
(1) Tangwáue \(k u \quad p e=t u e-t u e\), bushfowl egg 3SG.F=3SG.F.do-RED
'A bush turkey lays her eggs, ...'
(2) hángpeng tue,
bush 3SG.F.do
'in the bush.'
(3) Hangto=we pé=a moeng pe=tue \(=[\gamma] 0\),
sand=this \(\quad 3 \mathrm{SG} . \mathrm{F}=\mathrm{FOC} \quad\) sit \(\quad 3 \mathrm{SG} . \mathrm{F}=3 \mathrm{SG} . \mathrm{F} . \mathrm{do}=\mathrm{OBV}\)
'She sits on (a mound of) sand, and works it until...'
(4) \(a n a r a=w\)-,
like=EMPH
'it's like, ...'
(5) \([\mathrm{zai}] \quad p i\), uh mountain,
'a mountain, ...'
(6) \(i\) leng \(k a\) [ A\(]\) i-leng-lang \(a \quad p\left[{ }^{\mathrm{w}}\right]\) ang . stand become NEG ??-become-RED xxx 'it becomes like [a mountain].'
or is this give? xxxxx
(6) \(K u=i n g \quad p e=r\)-ue hí-hí hangto=ing \(a\),
egg=DEIC 3SG.F=3SG.F-lay go.down-RED sand=the
'She lays her eggs into this soil, ...'
(7) yahénglong to ha to riha to=ing a
rubbish or leaf or tree-leaf or=the
'rubbish or leaves, tree leaves, that sort of thing, ...'
(8) \(T e=\) ing \(a=k o \quad\) bépú-pú toe=ing=pa pe=te

3PL=the=OBV lay-RED 3.come=DEIC=INSTR 3SG.F=3SG.F.go
\(w-a=p a \quad t u ́=k o\)
3SG.F-walk=INSTR carry.PL=OBV
'those things, she lays (her eggs) on them, so she goes about and gets them and then, ...,
(9) bépú-pú toe ung=pa pe=toe
lay-RED 3.come now=INSTR 3SG.F=3SG.F.come
\(i \quad p e=w-a=k o \quad w-a=k o \quad w-a=k o\)
hole 3 SG.F=3SG.F-cover=OBV 3SG.F-walk=OBV 3SG.F-walk=OBV 'she lays them (the eggs), and then she comes to the hole, and covers it up, and then (waits) until, ...'

\footnotetext{
\(p e=r\)-úe \(e \quad\) tue bépú- \(p u ́=p a\),
3SG.F=3SG.F-lay 3SG.F.be 3SG.F.do lay-RED=INSTR
'she lays, she lays them, and, ...'
}
(11) \(k u=i n g ~ p e=r\)-úe-rúe \(=p a\),
egg=DEIC 3SG.F=3SG.F-get-RED=INSTR
'she lays her eggs, and , ...'
(12) \(p e=r\)-úe pú mong-mong.

3SG.F=3SG.F-lay nest sit.F-RED
'lays them, and sits on the nest, ...'
(13) \(K u\) (a)narang-rang \(p e=t u e=k o\) te
egg like-RED 3SG.F=3SG.F.do=OBV 3SG.NF.go
\(e \quad t i-t i\),
3PL.be 3PL.do-RED
'She's laid the eggs, they're there, ...'
(14) ana=ing a bépú-pú=pa pe=r-úe pú mong-mong.
like=the lay-RED=INSTR 3SG.F=3SG.F-lay nest sit.F-RED
'it's just that she lays them, and there they are.'
(15) Ing \(a\),
the
'So, ...'
(16) nahípa na hangpa na,
eight or twelve or
'eight or twelve or so, ...'
(17) bépú \(f\left[{ }^{\mathrm{W}}\right]\) átà=we pe=r-úe pú mong-mong tue.
lay all=this 3SG.F=3SG.F-lay nest sit.F-RED 3SG.F.do 'she lays them all, and there they are.'
(xxii) Tangwáue ku pe tue tue, hángpeng, tue. Hangto we pé a moeng pe tue ko, anara pì leng leng pang. Ku ing pe rue hî hí hangto ing \(a\), yahénglong to ha to ríha to ing \(a\) Te ing a ko bé pú pú toe ing pa pe te wa pa tú ko bé pú pú toe ung pa pe toe í pe wa ko wa ko ko ing pe rúe e tue bí pú pú pa, ku ing pe rúe rúe pa, pe rúe pu mong mong. Ku narang rang pe tue ko te e ti ti, ana ing a bépú pú pa pe rúe pú mong mong ing \(a\), nahípa na hangpa na, bípú fátà pe rúe pú mong mong tue.

\section*{23 Ke balèngtung}

Demons (15 secs)
These night wanderers are reportedly much fewer now that in former times, resulting in a change in architecture: modern houses now have a more open style, as there is thought to be less danger of demons and ghouls wandering in at night since the Christian church became active in the area. The houses closest to the church in Skou Mabo show the most open style, regardless of the degree of faith of those in those houses, or the more distant houses.
(1) Ke=balèng \(\left[{ }^{[\mathrm{Tr}}\right]\) ung,

3SG.NF=demon
'Demons, ...'
(2) \(n e=\) moeng,
\(1 \mathrm{PL}=\mathrm{sit}\)
'well we'd sit, ...'
(2) ne=moeng (a)na=we moeng ne=ti,

1PL=sit like=this sit 1PL=1PL.do 'we'd sit, like this we'd be sitting, ...'
(3) \(k e=t o e \quad a n a=r a\) [äre] \(k e=b a ̀\), 3SG.NF=3SG.NF.come like=also , 3SG.NF=person 'and he'd come in the form of a man, ...'
(4) túngpa \(k e=\) toe ne=fue-fue ti. perfect 3SG.NF=3SG.NF.come 1PL=see-RED 1PL.do 'just like one, and when he'd come, we'd see him.'
(5) Ke=balèngtung.

3SG.NF=demon
'Demons, ...'
(6) [还]- èpa na,
uh dream or 'um, when you dream, ...'
(7) \(k e=i n g \quad k e=b a l e ̀ n g t u n g . ~\)

3SG.NF=DEIC 3SG.NF=demon
'that demon, ...'
\begin{tabular}{llll} 
Te=balèngtung & \(n e=f e\) & \(n e\) & ti-ti. \\
3PL=demon & 1PL=see.PL & 1PL.be & 1PL.do-RED \\
'we see the demons.' & &
\end{tabular}
(xxiii) Ke balèngtung, ne moeng, ne moeng ana we moeng ti, ke toe ana ke bà, túngpa ke toe ne fue fue ti. Ke balèngtung. èpa na, ke ing ke balèngtung. Te balèngtung ne fe ne titi.

\section*{24 Tangwáto I}

Tangwato (version I) (2 mins 34 secs)
This story is an attempt to describe the land ownership of the coastline between Cape Juar in the west and the Tami river in the east of the Skou territory. I say 'attempt' because there are some factual errors here, which are corrected in the text that is presented as text 6 . The only significant Malay influences in this narrative are discourse connectors; there are, however, several significant errors of fact (which led to text 6 being recorded, as a correction to the information in this account).
(1) Tang[̣]wáto \(k e=i n g \quad\) te=Tángpe hangto-tè \(=t e\). Tangwato 3SG.NF=DEIC 3PL=Skou Yambe sand-3PL.GEN=3PL.DAT 'Tangwato, that's the Skou Yambe's sand.'
(2) \(T e=b a ̀=w i a\),

3PL=person=this
'These people, ...'
(3) te=ba Póeme.

3PL=Patipeme
'the Patipeme clan.'
(4) [Trus],
[and.then]
'And, ...'
(5) [pante itu ada],
[beach that exist]
'there's that beach, ...'
(6) báng=ing a \(k e=i n g\), beach=the 3SG.NF=DEIC
'there's that beach, ...'
(7) ne=Málo báng.

1PL=Mallo beach
'our, Mallo clan's, beach.'
(8) \(N e=M a ́ l o\),

1PL=Mallo
'us Mallos, ...'
(9) \(A\),
uh
'uh, ...'
(9) ne=Málo báng,

1PL=Mallo beach 'our beach, ..,
(10) [ada sabagian].
[exist part
'that's part of it.'
(11) Máló-[ [Jin]báng.

Mallo-beach
'A Mallo beach.'
(the high tone spread over the whole word from báng shows that this is a compound, and not a phrase, since we can see in other examples, for example line (9), that Málo is a word with a HL melody, which is overwritten here)
(12) Máló-báng=ing,

Mallo-beach=DEIC
'The Mallo beach, ...'
(13) \(k(e)=\) báng=ing te=Málo báng-tè.

3SG.NF=DEIC beach=DEIC 3PL=Mallo beach-3PL.GEN
'that beach is the Mallo's beach.'
(14) [Terus],
[and]
'And also, ...'
(15) \(t e=[\) zamping \(]=a\)

3PL=[side]=PROM
'the next lot, ...'
(16) \(w-a=k o t e\),

3SG.F-walk=OBV 3SG.F.go
'up at, ...'
(17) \(a\),
ah
'um, ...'
(18) Pa Úeròng.
river UUeròng
'The Úeròng river.'
(19) \(T e=b a\) Póeme jéng=ing \(a \quad t e ̀=t e\).

3PL=Patipeme place=the 3PL.GEN=3PL.DAT
'That place belongs to the Patipemes.'
(20) Te Tángpe,

Skou Sai
'Skou Sai, ...'
(21) \(m e ̀=a \quad t e=t e=i n g\),
village=PROM \(\quad 3 \mathrm{PL}=3\) PL=DEIC
'the village, they, they (have), ...'
(22) Te Tángpe \(m e ̀=a \quad k e=i n g ~ a\),

Skou Sai village=PROM 3SG.NF=the
'Skou Yambe village there, ...'
(23) \(a\),
ah
'ah, ...'
(24) pos,
aid.post
'(up to) the aid post, ...'
(25) te=baléng \(=a\) tángfa \(=k o\),

3PL=person-male=PROM men's.house=OBV 'the men's house, ...'
(26) tángfa \(=k o\).
men's.house \(=\) OBV
'the men's house.'
(27) Te tángfa
[を] \(\quad w-a=k o=r a\)
3PL=men's.house
\(w-a=k o=r a\)
3SG.F-walk \(=O B V=\) also
3SG.F-walk=OBV=only 3SG.F.go
'The men's house, ah, and from there, next you go to, ...'
(28) te Te Máwo,

3SG.F.go Skou Mabo
'to the, to Skou Mabo, ...'
(29) \(a\)
ah
'ah, ...'
(30) Te Máwo bàme,

Skou Mabo village
'the village of Skou Mabo, ...'
(31) a Skoula=koxxx toe-toe te,
a school=OBV 3.come-RED 3SG.F.go 'ah, to the school, coming along, ...'
(32) \(k e=i n g\),

3SG.NF=DEIC
'that's, ...'
(33) [Mallo dua] hángto-tè \(=t e\),
[Mallo II] sand-3PL.GEN=3PL.DAT
'Mallo II's sand, ...'
(34) hángto-tè=te fitong-tè.
sand-3PL.GEN=3PL.DAT ground-3PL.GEN
'their sand, their ground.'
(35) \([\varepsilon] \quad[\mathrm{kami}]=\) ing,
[1PL.EX]=DEIC
'that's ours, ...'
(36) \(a\),
ah
‘uh, ...'
(37) Hendrik, fítong-nè=ne,

Hendrik ground-1PL.GEN=1PL.DAT
'Me and Hendrik's ground, ...'
(Hendrik is the speaker's elder brother)
(38) [itu] hángto-nè=ne.
[that] sand-1PL.GEN=1PL.DAT
'they're our sands, ...'
(39) fitong-nè=ne.
ground-1PL.GEN=1PL.DAT
'our land.'
(40) \(W-a\),

3SG.F-walk
'Then you go to, ...'
(41) Te Tángpe \(=a\),

Skou Yambe=PROM
'Skou Yambe there, ...'
(42) tángfa hing.
men's.house other
'they have a separate men's house.'
(43) \(W-a=k o \quad w-a=k o \quad[\mathrm{~h}]-a=k o=(r) a \quad t e\),

3SG.F-walk=OBV 3SG.F-walk=OBV 3SG.F-walk=OBV=only 3SG.F.go 'and then, from there, you go and, ...'
(44) Te Máwo skoula=ko te-te.

Skou Mabo school=OBV 3SG.F.go-RED 'you get to the school at Skou Mabo.'
(45) Steap =ko te-te.
?? =OBV 3SG.F.go-RED
' [??] and then you go.' xxx
(46) \(\mathrm{Ke}=\mathrm{ing}\),

3SG.NF=DEIC
'There, that's ...
ne=Málo-[in][dua].
1PL=Mallo-[two]
'us Mallo II clan.'
(48) A pu me,
xx
'xx
(49) fítong=ing. ground=DEIC 'that land.'
(50) [Terus],
[and.then]
'And after that, ...'

(the nasalisation of =ing has, exceptionally, spread onto the preceding vowel of \(w-a\) in this line)
(52) báng-nè=ne=ing \(a\),
beach-1PL. GEN=1PL.GEN=the
'is our (Skou Mabo peoples') beach, ...'
(53) Awi,

Awi
'(no), it's Awi’s, ...'
(54) Awi hángto fítong-tè,

Awi sand ground-3PL.GEN
'Awi's beach, their land ...'
(55) \(\quad\left[\mathrm{T}[\right.\) 当 \(]\) rus \(\left[\begin{array}{l}\text { Gi }\end{array}\right]\) ].
[continue[
'and then, ...'
(56) \(A\),
ah
‘Ah, ...’
(57) ke Málo-tè,

3SG.NF Mallo-3PL.GEN
'he's Mallo's, ...'
(58) \(k e=b a r i ́=i n g\),

3SG.NF=person.chief=DEIC
'the village headman, ...'
(59) pí=ra jéng-ké[=tu],
speech=also place-3SG.NF.GEN[=that]
'I'm also talking about his place, ...'
(60) fítong-ké ke=ing. earth-3SG.NF.GEN 3SG.NF=DEIC
'it's his land, that (one).'
(61) \(T e=b a ̀ m a\),

3PL=villager
‘The villagers, ...'
(62) Málo [satu].

Mallo [one]
'Mallo I clan.'
(63) \(K e=b a r i ́-t e ̀=i n g=p a\),

3SG.NF=headman-3PL.GEN=DEIC=INSTR
'He's their headman
(64) \(a\),
ah
'uh, ...'
(65) \(t e=W i=p a\),

3PL=Awi=INSTR
'and the Awi's, ...'
(66) \(-t \stackrel{e}{=}=t e\),
-3PL.GEN=3PL.DAT
'theirs, ...'
(67) fítong-tè=te.
earth-3PL.GEN=3PL.DAT
'their land.'
(68) - \{Pa Ứeròng?\}
water Úeròng
'And what about the Úeròng river?'
(69) \([\varepsilon]\) ?
eh
'What?'
(70) - \{Pa Úeròng?\}
water Ueròng
'What about the Úeròng river?'
(an interjection from the author, queried by the speaker, and repeated, and in the next line corrected, since the Pa Uerong is to the west, not the east)
(71) Pa long.

River Long
'The Long river.'
(72) - \{Pa long \(\}\).

River Long
'(Right,) the Long river.'
(73) Pa Nípa?
river Nipa
'(Do you mean) the Nípa river?'
(74) \(-\{E\), Tami. Sungai Tami \(\}\).
[uh Tami River Tami]
'(No), the Tami. The Tami river.'
(75) [mungkin],
[maybe]
'That's probably, ...'
(76) Te Bapúbí pa,

Skou Sai river
'Skou Sai's river, ...'
(77) [kwe]-tè.
river-3PL.GEN
'their river.'
(Here 'river' is produced as [ \(\left.\mathrm{k}^{\mathrm{w}} \mathrm{B}\right]\) rather than the expected and universally prescriptive [pa]. This could be taken as a simple (though unusual) speech error apart from the fact that \({ }^{*} w_{a}\) is the reconstructed proto-Skou form for 'river, water'. See line 35 of Te Tang for another apparent example of the archaic retention of a earlier consonant form)
(78) Te Bapúbí palong,

Skou Sai River.Long
'Skou Sai's Long river, ...'
(79) Pailong bàng Te Bapúbí,

Tami.River beach Skou Sai
'the beach at the Tami River is also Skou Sai's, ...'
(80) \(w-a=k o=r a \quad\) te \(k e=i n g\),

3SG.F-walk=OBV=also 3SG.F.go 3SG.NF=DEIC
'up to there, to, ...'
(81) Te Jáwung=pa \(w-a=k o=r a\)

Nyao=INSTR 3SG.F-walk=OBV=also 3SG.F.go
'Nyao as well, up to there, ...'
(82) te=bà,

3PL=person
'those people, ...'
(83) \(a\),
uh
'um, ...'
(84) pìng,
war
'wars, ...'
(85) [dulu ka].
[earlier Q]
'in the olden days, you know.'
(86) \(W-a=k o=r a\) te,

3SG.F-walk=OBV=also 3SG.F.go
'up as far as there, ...'
(87) \(w-a=k o=r a\) hí te,

3SG.F-walk=OBV=also go.down 3SG.F.go
'and down to there (in the west), ...'
(89) Te=Húng toe,

Sentani 3.come
'Sentanis would come, ...'
(90) pìng te=ti [dulu ka].
war 3 PL=3pl.do [earlier Q]
'and they'd make war, in the olden days, you know.'
(91) Pa long,
river Long
'The Long river, ...'
(92) te=bà,

3PL-person
'they, ...'
(93) Paílong,

Tami.River
'the Tami River, ...'
(94) ke Te Bapúbí-tè ka ung [j]a,

3SG.NF Skou Sai=3PL.GEN now
'that's Skou Sai's now, ...'
(95) [kitykui],
???
(meaning unknown)
(96) Te Óeti.

Wutung
'to Wutung.'

\section*{Appendix 5 Comparative data on the Macro－Skou family languages}

Until recently there has been very little work on any of the languages of the Skou family，past the most basic of survey，mostly unpublished（see chapter 1 for more discussion as this relates to Skou itself）．
In this appendix I provide some basic lexical materials，which I hope will go some way towards redressing this lack of resources．I shall present some basic lexical sets first，in the form of pronouns and pronominal paradigms，followed by a list of basic lexical items in loose semantic classes，roughly following the order of the material presented in appendix 1．The Skou material is repeated here，in IPA transcription，in order to facilitate comparison between Skou and other languages．
Some comparative work on the Skou family has appeared in print，in Donohue（（2002b）and in Donohue and San Roque（2004；chapter 9）．The materials here are，however，far and away the most extensive lexical documentation that has appeared in print．

\section*{5．1 Pronominal evidence}

The tables present pronominal evidence from the different Skou languages，showing different pronominal sets where known．

Comparing the pronominal systems of the languages，the following correspondences emerge；recall that Skou groups with Leitre，Puare with Womo，and Barupu with Sumo（see figure 3）．Bound forms have been compared where possible，though in most cases the consonant associated with the bound form is identical to that associated with the free form．

Table xxxx．Pronominal correspondences for the Western Skou languages
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline & Skou & Nyao & Wutung & Dumo & Dusur & Leitre & ＊Skou \\
\hline 1SG & \(n i\) & \(n \stackrel{\text { ci }}{ }\) & \(n \stackrel{\text { E }}{ }\) & nt & \(n{ }_{\text {L }}\) & \(n i\) & ＊ne \\
\hline 2SG & \(m \stackrel{\text { coser }}{ }\) & \(m{ }^{\text {E }}\) & \(m{ }_{\text {c }}\) & m」 & \(m \dot{C}\) & \(m \stackrel{\text { r }}{ }\) & ＊me \\
\hline 3SG．M & \(k^{*}\) & S & d &  & 営 & \(k_{i}\) & ＊ k e \\
\hline 3SG．F & \(p^{*}\) & \％ & \％ & 5 & 5 & \(b i\) & \(*^{\mathrm{g}} \mathrm{w}_{\underline{\mathrm{E}}}\) \\
\hline 1PL & \(n{ }^{-}\) & \(n i\) & \(n i\) & \(n i\) & \(n i\) & nio & ＊ni \\
\hline 2PL & － & － & － & \(\stackrel{\square}{*}\) & \(\stackrel{\square}{*}\) & ¿du & ＊ \\
\hline 3PL & だ & だ & \(d_{i}\) & \(d \stackrel{ }{*}\) & \(d \stackrel{s}{ }\) & diko & ＊ r E \\
\hline
\end{tabular}

Table xxxx. Agreement prefixes in Western Skou languages
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline & Skou & Nyao & Wutung & Dumo & Dusur & Leitre & *Skou \\
\hline 1SG & \(\emptyset-, k-, n-\) & \(\emptyset\)-, \(k\) - & Ø- & Ø- & ¢- & Ø-, , - & * ¢! \\
\hline 2SG & \(m\) - & \(m\) - & m- & m- & \(m\) - & m- & * m- \\
\hline 3SG.NF & \(k\) - & \(k\) - & 3 & - & \(h\) - & \(k\) - & * k- \\
\hline 3SG.F & p- & tr \({ }^{\prime}\) - & \({ }^{\prime}\) & \(b\) - & \({ }^{6}\) & \(\square^{W}\) & * \({ }^{\text {w }}\) - \\
\hline 1PL & \(n-\) & \(n-\) & \(n-\) & \(n-\) & \(n\) - & \(n\) - & * n- \\
\hline 2PL & \(\emptyset\) - & \(\emptyset\) - & \(\emptyset\) - & \(\emptyset\) - & \(\emptyset\) - & \(\emptyset\) - & * \(\emptyset\) - \\
\hline 3PL & \(t-1 y-\) & \(t-1 y-\) & \(d-1 / y-\) & \(d-1 y-\) & \(d-/ y\) - & \(d-/ y\) - & * d- / y- \\
\hline
\end{tabular}

Table xxxx. Pronominal correspondences for the Serra Hills languages
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & Puare & Rawo & Sumararu & Womo & Nouri & *Serra \\
\hline 1SG & anna & nan & [ & na & & *ne \\
\hline 2SG & amma /mi & mit:m / mim & - & me / mo & & *me \\
\hline 3SG.M & Si & S & Si & . 71 & & * kE \\
\hline 3SG.F & \% & \(\stackrel{\square}{5}\) & g & 石 & & \({ }^{\text {g }}{ }^{\text {w }}\) e \\
\hline 1DU & nihindi & ip & & & & \\
\hline 1PL & bi & ap & 8 & neni & & *ni \\
\hline 2PL & pihi & pi & M: & & & * \\
\hline 3PL & ki & ke & S它 & & & \({ }^{2} \mathrm{E}\) \\
\hline
\end{tabular}

Table xxxx. Agreement prefixes in Serra Hills languages
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & Puare & Rawo & Sumararu & Womo & Nouri & *Serra \\
\hline 1SG & \(n-\) & \(n-\) & & \(n-\) & & * n - \\
\hline 2SG & \(m\) - & \(m\) - & & \(m(y)\) - & & *m- \\
\hline 3SG.NF & 5 & & & (k) \(\xi^{\prime}\) & & *k- \\
\hline 3SG.F & 5 & & & \(p^{5}\) & & *xx- \\
\hline 1DU & \(h^{-}, n^{y}\) - & & & \(n^{y}\) - & & *ny- \\
\hline 1PL & \(b\) - & & & \(b\) - & & *b- \\
\hline 2PL & \(h\) - & & & \(p\) - & & *p- \\
\hline 3PL & \(p\) - & & & kw- & & *gW- \\
\hline
\end{tabular}

Table \(x x x x\). Pronominal correspondences for the Piore River languages and I'saka
\begin{tabular}{|c|c|c|c|c|c|}
\hline & Sumo & Ramo & Barupu & *Piore & I'saka \\
\hline 1SG & & & & *ne & depu \\
\hline 2SG & & & & *me & bepu \\
\hline 3SG.M & & & & *ke & kia \\
\hline 3SG.F & & & & \({ }^{*} \mathrm{~g}_{\boldsymbol{E}} \boldsymbol{e}\) & omu \\
\hline 1DU & & & & & nanasi \\
\hline 1PL & & & & *ni & numu \\
\hline 2PL & & & & * & yumu \\
\hline 3PL & & & & \({ }^{\text {re }}\) & ie \\
\hline
\end{tabular}

Table xxxx. Agreement prefixes in Piore River languages and I'saka
\begin{tabular}{|c|c|c|c|c|c|}
\hline & Sumo & Ramo & Barupu & *Piore & I'saka \\
\hline 1SG & ana- & & \(V n(a)\) - & *Vna- & \(n \sim d\) - \\
\hline 2SG & \(V m(u)\) - & & \(V m(u)\) - & * Vm(u)- & \(m \sim b-\) \\
\hline 3SG.NF & \(a\) - & & \(a\) - & *a- & \(k\) - \\
\hline 3SG.F & \(o\) - & & \(o\) - & *O- & w- \\
\hline 1DU & epe- & & epi- & *epi- & si- \\
\hline 1PL & \(e\) - & & emi- & *e- & \(n i \sim d i-\) \\
\hline 2 PL & \begin{tabular}{l}
ити-, \\
eve-
\end{tabular} & & opu-,
eve- & *opu-, eve- & \(i\) - \\
\hline 3PL & \(i-\), ere- & & \(e\)-, ere- & *i-, ere- & \(e-\) \\
\hline
\end{tabular}

There is a clear correspondence pattern in some forms, with the first and second person singular forms the most regular, along with the masculine. The feminine forms are innovative in Serra Hills languages, with a neuter gender spreading its function, and the first and second person plurals are suppletive in both Serra Hills and Piore River, the former grouping of which also has suppletive third person plural. Based just on this evidence we would want to group Serra Hills and Piore River together, against a Skou group and I'saka as an isolate, as shown in figure 10 .

\subsection*{5.2 Comparative wordlists}

The following wordlists summarise a basic wordlist collected for each of the language varieties surveyed, in West Papua and in Papua New Guinea. There are several gaps in the lists, corresponding to points in the survey where elicitation was too difficult, not implying that the language lacks these concepts.
The transcription follows IPA standards, except that \(\mathrm{y}=\) palatal glide and \(\ddot{u}=\) high front rounded vowel. The letter values used in tonal transcription approximate to the following pitch levels (following usual Chao conventions, with \(1=\) lowest pitch and \(5=\) highest pitch): H

The transcription follows IPA standards, except that \(y=\) palatal glide and \(\ddot{u}=\) high front rounded vowel. The letter values used in tonal transcription approximate to the following pitch levels (following usual Chao conventions, with \(1=\) lowest pitch and \(5=\) highest pitch):

H \(44 / 55\)
L 22/11
R 35
F 52/41
I 54
W 353
C 453
D 313
f slight fall off previous pitch level
r slight rise from previous pitch level
x continue previous tone over following syllables

So, for instance, in Barupu item 13, [kanienietu] 'fingernail', is noted with Lx for tone, and is all low tones, and 'all' in Puare is [kuni] 55 12, from it's transcription as H Lr.

Transcription is midway between phonetic and phonemic. For the languages with betterunderstood phonologies, the transcription is more phonemic, but with the less understood languages minimal analysis has been pursued. In general, the following points apply to the wordlists:
- epenthetic schwas that alternate with \(\emptyset\) have been omitted
- in the Skou languages nasalisation has been written with a following n; phonetically this represents nasalisaton of the vowel, which is lowered slightly from its cardinal position, and optional prenasalisation of a following stop. With a phonemic /u/ nasalisation results in centralisation of the vowel, or simply a syllabic y
- nasalisation in I'saka has been shown orthographically, with bã and dã represented as \(m a\) and \(n a\), respectively, and nasalisation on any other syllables shown with a following \(\dagger\) ỵ (see 'head' and 'eye' in the lists)
- transcribed r and 1 in I'saka represent allophones of the \(/ \mathrm{d} /\) phoneme, and Y represents the intervocalic allophone of \(\mathbb{K} /\).
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & \[
\begin{aligned}
& 1 \\
& \text { head }
\end{aligned}
\] & & \[
\begin{aligned}
& 2 \\
& \text { hair } \\
& \hline
\end{aligned}
\] & & 3 eye & & \begin{tabular}{l}
4 \\
ear
\end{tabular} & \\
\hline I＇saka & tanu & LR & ya & R & nokey & LR & tari & LH \\
\hline Rawo & wasa & MH & wale & MH & nĩ & R & sep \({ }^{71}\) & Lf \\
\hline Puare & ｜kwambo & HF & wakahe & \[
\begin{aligned}
& \mathrm{HH} \\
& \mathrm{~F}
\end{aligned}
\] & nehetpe & \[
\begin{aligned}
& \mathrm{HR} \\
& \mathrm{H}
\end{aligned}
\] & spe & I \\
\hline Womo & luwn & & wakei & & irpili & & wande（i） & \\
\hline Sumararu & pu & H & 品we & FH & incry & HF & plz & Lf \\
\hline Nouri & 3wapow & HI & swape & HL & nipye & HL & － & \\
\hline Poo & tje & I & tjape & LW & ine & FL & tepe & FL \\
\hline Sumo & tjapore & HF & tjape & LR & me & HL & tepe & HH \\
\hline Ramo & tea & HF & tjepe & LR & ne & HL & tepe & HH \\
\hline Barupu & tje & L & tjepe & LW & ine & LL & t阝e & LH \\
\hline \multirow[t]{2}{*}{Warapu \({ }_{\text {DCL }}\)} & tya & & ya pei & & ini & \multicolumn{3}{|c|}{\multirow[t]{2}{*}{tep／sep}} \\
\hline & 1－ & & wa－kahe & & inimk & & & \\
\hline & 1 & & 2 & & 3 & & 4 & \\
\hline & head & & hair & & eye & & ear & \\
\hline Sekou \({ }_{\text {GALIS }}\) & rebe & & & & luto & & leou & \\
\hline Tumawoclv & rö＇be & & ta & L & luts & & 10̈ & \\
\hline Skou MARK & mbi & FL & ta & L & luto & HL & lo & H \\
\hline Sangke & kesu & & & & retó & LH & krire & \\
\hline Nyao & & & & & & & & \\
\hline Wutungwp & ro＇bo & HL & & & latò & LF & ๙ưa & HF \\
\hline Wutung \({ }_{\text {PNG }}\) & hnitibg & HF & t & L & lutio & LF & 亩四 & FL \\
\hline Dumo & tiil & F & da & L & \％ 7 & L &  & FL \\
\hline Dumombr & tiil & F & d当 & H & & & & \\
\hline Dusur &  & HF & de & F & blidu & HF & hlüripa & HL \\
\hline Leitre & tưke & LL & tû̉ke sì & F & bdu & HL & kİ̈ pa & FL \\
\hline proto－Skou & tlympwe & FL & jax & & klado & & klyipa & \\
\hline
\end{tabular}

\footnotetext{
71 Laycock（1973：254）lists Rawo sep，Puari sebre．
}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & \[
\begin{aligned}
& \hline 5 \\
& \text { nose }
\end{aligned}
\] & & \[
\begin{aligned}
& \hline 6 \\
& \text { mouth }
\end{aligned}
\] & & \[
\begin{aligned}
& 7 \\
& \text { lip }
\end{aligned}
\] & & \[
\begin{aligned}
& 8 \\
& \text { tooth }
\end{aligned}
\] & \\
\hline I＇saka & dapu & LL & tuw & LR & konou． & LR & kiti & R \\
\hline Rawo & usi & LH & Bwanum & HL & pisil & HH & nuw & I \\
\hline Puare & mwoheni & \[
\begin{aligned}
& \mathrm{HL} \\
& \mathrm{H}
\end{aligned}
\] & ｜fiepre & FH & ampusu． & LH & nuwa & HF \\
\hline Womo & wa & F & ausomo & & busu & & nowkili & \\
\hline Sumararu & Twa & I & asum & LF & bus & H & now & R \\
\hline Nouri & upa & FL & notu & HL & － & & ＋io & HLf \\
\hline Poo & 140 & HH & 0 & R & rota & LW & \(\varepsilon\) & R \\
\hline Sumo & 140 & FL & 0 & H & notera \({ }^{72}\) & \[
\begin{aligned}
& \text { LH } \\
& \text { L }
\end{aligned}
\] & eut & H \\
\hline Ramo & 400 & FL & \(\square\) & H & moun，mani & LL & eu & \\
\hline Barupu & uwo & HH & 0 & H & rote & LW & \(\varepsilon\) & H \\
\hline \multirow[t]{3}{*}{Warapu \({ }_{\text {DCL }}\)} & uwo & & \begin{tabular}{l}
ndio \\
（asum）
\end{tabular} & & V［m］p［u］su & & ee
now & \\
\hline & 5 & & 6 & & 7 & & 8 & \\
\hline & nose & & mouth & & lip & & tooth & \\
\hline Sekougalis & lélong & & languw & & & & ke＇en & \\
\hline Tumawo clv & ha & & lángöw & & & & kö＇ & \\
\hline Skoumark \(^{\text {ma }}\) & hat & H & 1畋 & HL & per & LL & k & H \\
\hline Sangke & namui & & nare & & chèfá & & ke & \\
\hline \multicolumn{9}{|l|}{Nyao} \\
\hline Wutungwp & & & lale，male & DM & & & hiij & H \\
\hline Wutung \(_{\text {PNG }}\) & กับบล & FL & nela & HL & cifa & DM & ii & L \\
\hline Dumo & neib & FL & 13． & F & bito & HL & \％imo & FL \\
\hline Dumombr & nahu & HF & & & & & J31 & L \\
\hline Dusur & guwe & HF & 13． & F & biato & HL & 桄，䛔 & F \\
\hline Leitre & nakií & LL & ne． & F & bipa & HL & koni & HL \\
\hline proto－Skou & na－gum & & 18（8） & & gwito & & koni & \\
\hline
\end{tabular}

\footnotetext{
72 Possibly a loan from One＊tefs，＞tepe in Mafoka，the closest One language to Sumo．
}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & \begin{tabular}{l}
\[
9
\] \\
tongue
\end{tabular} & & \[
\begin{aligned}
& 10 \\
& \text { hand }
\end{aligned}
\] & & 11 elbow & & \begin{tabular}{l}
12 \\
finger
\end{tabular} & \\
\hline I'saka & mai & R & dou. & R & dou ninalsou & LR & doun may & \[
\begin{aligned}
& \text { LL } \\
& \text { R }
\end{aligned}
\] \\
\hline Rawo & pay & M & ben & & bestra & HH & betpal & HL \\
\hline Puare & pks & M & ano & IM & anko & IR & anokri & LR \\
\hline Womo & poko & & ono & & on wali & & siulu & \\
\hline Sumararu & pak & L & on & H & siu & Lf & On & H \\
\hline Nouri & - & & Enu & FL & - & & - & \\
\hline Poo & pyandu & FL & Enw & FL & bamborum & L & enupe & FL \\
\hline Sumo & piya & HL & ens & FL & pikapaw & \[
\begin{aligned}
& \text { LL } \\
& \text { F }
\end{aligned}
\] & enome & W
FL
L \\
\hline Ramo & peya & LL & enope & \[
\begin{aligned}
& \text { FL } \\
& \mathrm{L}
\end{aligned}
\] & Enou & LF & enopme & \[
\begin{aligned}
& \text { FL } \\
& \text { LR }
\end{aligned}
\] \\
\hline Barupu & pientu & \begin{tabular}{l}
LL \\
HL
\end{tabular} & Enw & FL & pika & LL & enupe & \\
\hline \multirow[t]{2}{*}{Warapu \({ }_{\text {DCL }}\)} & pianutu
pako & & enu
enu & & Enu sku & & \begin{tabular}{l}
Enu \\
mimeimi \\
enu kul
\end{tabular} & \\
\hline & \[
9
\] & & \[
\begin{aligned}
& 10 \\
& \text { hand }
\end{aligned}
\] & & \[
\begin{aligned}
& 11 \\
& \text { elbow }
\end{aligned}
\] & & \[
\begin{aligned}
& 12 \\
& \text { finger }
\end{aligned}
\] & \\
\hline \begin{tabular}{l}
Sekou \({ }_{\text {GALIS }}\) \\
Tumawo clv
\end{tabular} & puw & & \begin{tabular}{l}
nô \\
no-bero
\end{tabular} & & & & & \\
\hline Skoumark &  & H & no & F & noitiry & \[
\begin{aligned}
& \text { FL } \\
& \mathrm{L}
\end{aligned}
\] & nokâk & \[
\begin{aligned}
& \text { FL } \\
& \mathrm{L}
\end{aligned}
\] \\
\hline Sangke & nirò & & nokè & & & & & \\
\hline \multicolumn{9}{|l|}{Nyao} \\
\hline Wutung \({ }_{\text {WP }}\) & nìlo & & nò'heng & & & & noturu & DM \\
\hline Wutung \(_{\text {PNG }}\) & nill & HL & nos & FL & nosielwedi & DM & notiza & FL \\
\hline & & & & & & & & F \\
\hline Dumo & \(1{ }^{\text {E }}\) & F & nu & L & pamalus & \[
\begin{aligned}
& \text { LL } \\
& \text { F }
\end{aligned}
\] & nupl3 & LH \\
\hline Dumombr \(^{\text {a }}\) & & & nu & L & & & nupl3 & LF \\
\hline Dusur & \(1 \underset{3}{ }\) & F & riz & F & pabla & LF & Tilu & HF \\
\hline Leitre & nei & HL & nu & H & nesinam & \[
\begin{aligned}
& \mathrm{HL} \\
& \mathrm{HF}
\end{aligned}
\] & nuls & HL \\
\hline proto-Skou & (13) & & n & & 34 & & -kel \(/\) pl \({ }^{\text {3/ }}\) & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & \multicolumn{2}{|l|}{13} & \multicolumn{2}{|l|}{14} & \multicolumn{2}{|l|}{15} & \multicolumn{2}{|l|}{16} \\
\hline & \multicolumn{2}{|l|}{fingernail} & \multicolumn{2}{|l|}{breast} & \multicolumn{2}{|l|}{stomach} & \multicolumn{2}{|l|}{liver} \\
\hline I'saka & dow nonie & \[
\begin{aligned}
& \text { RH } \\
& \mathrm{F} \\
& \hline
\end{aligned}
\] & ni & H & yow & R & 38 & F \\
\hline Rawo & besempe & \[
\mathrm{HM}
\]
\[
\mathrm{R}
\] & 30 & Mf & 6ek & M & se & F \\
\hline Puare & \multicolumn{2}{|l|}{3oppolefix} & 30 & I & aurs & ML & 35 & F \\
\hline Womo & \multicolumn{2}{|l|}{\begin{tabular}{l}
ongeder \\
[ondjeqge]
\end{tabular}} & 30 & F & kie & & siẓi & \\
\hline Sumararu & Onser] & HL & 30 & H & kys & F & 35 & F \\
\hline Nouri & \multicolumn{2}{|l|}{-} & \(t\) & H & amutu & \[
\overline{\mathrm{LH}}
\]
L & - & \\
\hline Poo & \multicolumn{2}{|l|}{kanyeto HL} & \(\square\) & R & \(\mathrm{i}(\mathrm{mo})\) & \[
\begin{aligned}
& \mathrm{W}, \\
& \mathrm{HH} \\
& \hline
\end{aligned}
\] & tom & LW \\
\hline Sumo & Enatai & FL
\[
L
\] & to & H & to & F & toton & LF \\
\hline Ramo & cnute & \[
\begin{aligned}
& \mathrm{LF} \\
& \mathrm{~L} \\
& \hline
\end{aligned}
\] & 0 & H & to & D & \(\square\) & D \\
\hline Barupu & kamienie.tu & Lx & tis & R & Ri(mu) & \[
\begin{aligned}
& \mathrm{W}, \\
& \mathrm{HL} \\
& \hline
\end{aligned}
\] & totomu & \[
\begin{aligned}
& \mathrm{LH} \\
& \mathrm{~L} \\
& \hline
\end{aligned}
\] \\
\hline Warapu \({ }_{\text {DCL }}\) & \multicolumn{2}{|l|}{kanyinyitu.} & \multicolumn{2}{|l|}{tu} & \multicolumn{2}{|l|}{ii} & \multicolumn{2}{|l|}{-} \\
\hline & \multicolumn{2}{|l|}{\[
\begin{aligned}
& \text { b-enu } \\
& \operatorname{serge}
\end{aligned}
\]} & \multicolumn{2}{|l|}{3010} & \multicolumn{2}{|l|}{kie / amund} & \multicolumn{2}{|l|}{36} \\
\hline
\end{tabular}


\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & 21 & & \multicolumn{2}{|l|}{22} & \multicolumn{2}{|l|}{23} & \multicolumn{2}{|l|}{24} \\
\hline & \multicolumn{2}{|l|}{blood} & \multicolumn{2}{|l|}{bone} & \multicolumn{2}{|l|}{flesh} & \multicolumn{2}{|l|}{urine} \\
\hline I'saka & 3 i & H & wiya & LL & 6\% & R & 31 & L \\
\hline Rawo & n3 & F & fol & F & Bil & F & 301 & L \\
\hline Puare & ni & H & to & H & pe & F & 315 & I \\
\hline Womo & ine & IL & ulu & & pei & R & 3weli & \\
\hline Sumararu & in & H & u. & Lf & enk & H & sपiilk & H \\
\hline Nouri & ini & FL & utie & HLL & bey & I & toro & \\
\hline Poo & no & H & riks. & FL & mbey & L & - & \\
\hline Sumo & no & H & repa & HL & bei & F & tirs & HL \\
\hline Ramo & no & R & rika/dika & HL & bei & D & - & \\
\hline Barupu & nos & H & rika & HL & bei & L & tive & LH \\
\hline \multirow[t]{2}{*}{Warapu \({ }_{\text {DCL }}\)} & nu & & ixas & & - & & - & \\
\hline & in & & ulu & & (p) \({ }^{\text {b }}\) ) & & 3 wilo & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & \multicolumn{2}{|l|}{21} & \multicolumn{2}{|l|}{22} & \multicolumn{2}{|l|}{23} & \multicolumn{2}{|l|}{24} \\
\hline & blood & & bone & & flesh & & urine & \\
\hline Sekou \(_{\text {GALIS }}\) & hî & & & & na & & & \\
\hline Tumawo clv & hi & & ee & & nà & & & \\
\hline Skou MARK & hi & F & \(\varepsilon\) & H & na & F & - & \\
\hline Sangke & hi & & & & & & & \\
\hline \multicolumn{9}{|l|}{Nyao} \\
\hline \multicolumn{9}{|l|}{Wutung \({ }_{\text {WP }}\)} \\
\hline Wutung \({ }_{\text {PNG }}\) & hyinje & HL & E & F & nie & FL & hipa & F \\
\hline Dumo & yi & F & 2e & F & da & F & nya & F \\
\hline Dumombr & & & & & ne & F & & \\
\hline Dusur & ḑia & F & e & F & nome & HF & nyax & F \\
\hline Leitre & yi & F & csic & HL & ni & F & nyma. & FL \\
\hline & & & & & & & & \\
\hline proto-Skou & hinyi & F & e & & n(ile) & F & [hnya] & F \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & \multicolumn{2}{|l|}{25} & \multicolumn{2}{|l|}{26} & \multicolumn{2}{|l|}{27} & \multicolumn{2}{|l|}{28} \\
\hline & \multicolumn{2}{|l|}{faeces} & \multicolumn{2}{|l|}{person} & \multicolumn{2}{|l|}{man} & \multicolumn{2}{|l|}{woman} \\
\hline I'saka & ou & F & dake. & LF & mini & LL & bu. & L \\
\hline Rawo & 6ai & F & - & & sik & H & mulu & LH \\
\hline Puare & amo & FL & - & & kara. & HH & mki & H \\
\hline Womo & \multicolumn{2}{|l|}{kiz} & \multicolumn{2}{|l|}{-} & \multicolumn{2}{|l|}{cpenda} & \multicolumn{2}{|l|}{weumbwe} \\
\hline Sumararu & kye & F & kenin & FL & ka & F & זWe & F \\
\hline Nouri & apena & HHI & & & enimu & LF & Enumpe & LF \\
\hline Poo & - & & - & & byam & F & bom & R \\
\hline Sumo & a & L & & & mabyam & LL & mapyon & LF \\
\hline Ramo & - & & & & byam & F & bum & R \\
\hline Barupu & a & L & & & biam & L & boim & R \\
\hline Warapu \({ }_{\text {DCL }}\) & - & & & & bio & & boum & \\
\hline & a & & & & k- & & mw- & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & \multicolumn{2}{|l|}{25} & \multicolumn{2}{|l|}{26} & \multicolumn{2}{|l|}{27} & \multicolumn{2}{|l|}{28} \\
\hline & faeces & & person & & man & & woman & \\
\hline Sekou \({ }_{\text {GALIS }}\) & & & bá & & teba-lên & & teûme & \\
\hline Tumawo \({ }_{\text {CLV }}\) & am & & ba & & & & peme' & \\
\hline Skou MARK & hi & L & be. & F & ke ba & LF & pe yme & Lx \\
\hline Sangke & & & te ba & & panju & & paù & \\
\hline Nyao & & & & & & & & \\
\hline WutungWP & & & & & & & & \\
\hline Wutung PNG & he & F & pa & DM & риара & DM & wiawia & DM \\
\hline Dumo & epi & FL & wa & F & wany & FL & wawS & FL \\
\hline Dumombr & & & Ba & H & Bays & HF & Bap & HF \\
\hline Dusur & epi & \[
\begin{aligned}
& \mathrm{HH} \\
& \mathrm{f}
\end{aligned}
\] & \begin{tabular}{l}
\[
\text { wa/ / } \beta \mathrm{a} /
\] \\
va.
\end{tabular} & L & Banys & HF & FB6 & \\
\hline Leitre & E & F & wa & F & wanyu & HL & waii & HL \\
\hline & & & & & & & & \\
\hline proto-Skou & h[e] & & ba & F & -nyo & & -w \({ }^{\text {a }}\) & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & \multicolumn{2}{|l|}{29} & \multicolumn{2}{|l|}{30} & \multicolumn{2}{|l|}{31} & \multicolumn{2}{|l|}{32} \\
\hline & \multicolumn{2}{|l|}{husband} & \multicolumn{2}{|l|}{wife} & \multicolumn{2}{|l|}{mother} & \multicolumn{2}{|l|}{father} \\
\hline I'saka & ini & LH & bua. & LL & moni & LH & tani & LH \\
\hline Rawo & sik & H & mulu & MH & mbul & R & Ol & R \\
\hline Puare & \multicolumn{2}{|l|}{kaini} & wimi & FH & ti & H & upu & HR \\
\hline Womo & \multicolumn{2}{|l|}{kanwoly} & \multicolumn{2}{|l|}{molo} & \multicolumn{2}{|l|}{d 4 wi} & \multicolumn{2}{|l|}{kalo} \\
\hline Sumararu & ka. & F & \multicolumn{2}{|l|}{पwe} & wipe & MR & kal & Lf \\
\hline Nouri & arimu & LF & Erinwe & LF & nima & RL & aiyaya & IRL \\
\hline Poo & am & R & om & R & mo & W & tata. & Hx \\
\hline Sumo & byan & I & bon & H & neu. & F & nene & LR \\
\hline Ramo & & & & & mo & D & tata & LL \\
\hline Barupu & ambo & LH & biam & L & mo, kwan & \[
\begin{aligned}
& \mathrm{W}, \\
& \mathrm{~L}
\end{aligned}
\] & tjakan, tiita, alse & \[
\begin{aligned}
& \text { RL, } \\
& \mathrm{L}, \\
& \mathrm{~L} \\
& \hline
\end{aligned}
\] \\
\hline Warapu \({ }_{\text {DCL }}\) & & & & & mani & & yetaita. & \\
\hline & & & & & ti & & kal & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & \multicolumn{2}{|l|}{29} & \multicolumn{2}{|l|}{30} & \multicolumn{2}{|l|}{31} & \multicolumn{2}{|l|}{32} \\
\hline & husband & & wife & & mother & & father & \\
\hline \multicolumn{9}{|l|}{Sekougalis} \\
\hline Tumawo clv & & & & & ma, áni & & ái & \\
\hline Skou MARK & pay & H & \(\varepsilon\) & F & ani & HF & ai & HF \\
\hline Sangke & & & & & ana & & ete & \\
\hline \multicolumn{9}{|l|}{Nyao} \\
\hline \multicolumn{9}{|l|}{Wutung \({ }_{\text {WP }}\)} \\
\hline Wutung \({ }_{\text {PNG }}\) & tja & DM & tiea & DM & ame & DM & apa & DM \\
\hline Dumo & da & L & wo & L & ance & HL & cne & FL \\
\hline Dumombr \(^{\text {a }}\) & day & H & BThe & H & hä & H & \(\varepsilon\) & H \\
\hline Dusur & dabe & HL & Bhe & HL & yane & HF & edi & HL \\
\hline Leitre & bebl & HL & were & HL & anya & LL & apa & LL \\
\hline & & & & & & & & \\
\hline proto-Skou & 9wá & & W3 & & \begin{tabular}{l}
yane \\
panya
\end{tabular} & & ai & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & 33 & & 34 & & 35 & & 36 & \\
\hline & child & & g'mother & & g'father & & grandchild & \\
\hline I'saka & dakau/nai & LR & yani & LL & yani & LL & yani & LL \\
\hline Rawo & mesa & FL & ulu & HH & 0 & HH & kE. & L \\
\hline Puare & mwali & & mofo & & mafie & & mofo, mabia & \\
\hline Womo & kols & & momo & & mome & & momo & \\
\hline Sumararu & maipe & LL & mo. & L & kmo. & L & mon maipe & \[
\begin{aligned}
& \text { LL } \\
& \mathrm{L} \\
& \hline
\end{aligned}
\] \\
\hline Nouri & ato & RI & - & & - & & - & \\
\hline Poo & ma & L & kopu & HL & kyapu. & LL & \(x\) mentan & R- \\
\hline Sumo & ma & L & opu & LL & apo & LL & \(x\) mama & LL \\
\hline Ramo & ma & L & opu. & LL & apo & LL & \(x\) meai & LL \\
\hline Barupu & ma & L & kopu. & HL & tfap & LL & \(x\) mmant & HL \\
\hline Warapu \({ }_{\text {dCL }}\) & \multicolumn{2}{|l|}{anmivoma} & \multicolumn{2}{|l|}{kwopu.} & \multicolumn{2}{|l|}{tapu.} & \multicolumn{2}{|l|}{-} \\
\hline & & & & & & & & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & 33 & & \multicolumn{2}{|l|}{34} & \multicolumn{2}{|l|}{35} & \multicolumn{2}{|l|}{36} \\
\hline & child & & \multicolumn{2}{|l|}{g'mother} & \multicolumn{2}{|l|}{g'father} & \multicolumn{2}{|l|}{grandchild} \\
\hline \multicolumn{9}{|l|}{Sekougalis} \\
\hline \multicolumn{9}{|l|}{Tumawo \({ }_{\text {CLV }}\)} \\
\hline Skou MARK & aku & LL & tata & LL & tata. & LL & tata & LL \\
\hline \multicolumn{9}{|l|}{Sangke} \\
\hline \multicolumn{9}{|l|}{Nyao} \\
\hline \multicolumn{9}{|l|}{Wutung \({ }_{\text {WP }}\)} \\
\hline Wutung \(_{\text {PNG }}\) & E, clema & DM & ateyay & DM & ateyaya & DM & ateyaya & DM \\
\hline Dumo & Emals & HLL & adewamili & 4L & adeway & 4L & wadie & 3L \\
\hline Dumombr \(^{\text {d }}\) & E & H & a & H & a & H & & \\
\hline Dusur & e fivelo & \[
\begin{aligned}
& \mathrm{HLL} \\
& \mathrm{~L} \\
& \hline
\end{aligned}
\] & & & & & & \\
\hline Leitre & 1 & L & ade & LF & ama. & LL & ama. & LL \\
\hline & & & & & & & & \\
\hline & e- & & a & & a & & a & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & & & & & & & & \\
\hline & \multicolumn{2}{|l|}{I/me} & \multicolumn{2}{|l|}{you.M} & \multicolumn{2}{|l|}{you.F} & \multicolumn{2}{|l|}{he} \\
\hline I'saka & \[
\begin{aligned}
& \text { nena / } \\
& \text { depu }
\end{aligned}
\] & LL & mama/ bepu & LL & \begin{tabular}{l}
mama! \\
bepu
\end{tabular} & LL & kia & \\
\hline Rawo & nän & I & mem & F & mim & H & ko & M \\
\hline Puare & ana & & ame & & mi & & ka & \\
\hline Womo & na. & & me & & mo & & ya & \\
\hline Sumararu & an & F & em & I & Em & I & ka & \\
\hline & & & & & & & & \\
\hline Nouri & ane & & ame & & ume & & a & \\
\hline Poo & nena/nen & R & mema & RH & mom & R & ya & H \\
\hline Sumo & neins & & nems & & nemy & & neo & \\
\hline Ramo & nena/neni & & nema & & nomul nemu & & d5a & F \\
\hline Barupu & nena/neni & RH & mema & RH & momu & RH & ya & H \\
\hline Warapu \({ }_{\text {DCL }}\) & nena. & & moma. & & moma & & dya & \\
\hline & ane & & ame & & we & & ka & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & & & & & & & & \\
\hline & I/me & & you.M & & you.F & & he & \\
\hline Sekougalis & ni & & mé & & mé & & ke & \\
\hline Tumawo \({ }^{\text {CLV }}\) & ni & & me & & me & & kë & \\
\hline Skou \({ }_{\text {MARK }}\) & ni & F & mes & F & me & F & ke & L \\
\hline Sangke & ni & & me & & me & & ke & \\
\hline Nyao & & & & & & & & \\
\hline WutungwP & & & & & & & & \\
\hline Wutung \({ }_{\text {PNG }}\) & ne & H & me & F & me & F & 2e & L \\
\hline Dumo & ne & F & mi & F & mi & F & 2e & L \\
\hline Dumo \({ }_{\text {MDR }}\) & ne & H & mi & L & mi & L & he & H \\
\hline Dusur & ne & F & mi & F & mi & F & hes & F \\
\hline Leitre & nyi & F & me & H & me & H & ke & L \\
\hline & & & & & & & & \\
\hline & ni (<*Ţi) & & mi & & mi & & \(\mathrm{k} e\) & L \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & & & & & \multirow[b]{2}{*}{we.PL} & & \multicolumn{2}{|l|}{\multirow[b]{2}{*}{you.PL}} \\
\hline & she & & we.DU & & & & & \\
\hline I'saka & wnu & LL & nesil & & numu & LL & yumu & LL \\
\hline Rawo & \(\varepsilon\) & & ip & & ap & & pi & \\
\hline Puare & wi & & nifi(ndi) & & bi & & pifi & \\
\hline Womo & we & & nye & & neni & & & \\
\hline Sumararu & पwe & & be & & be & & pe & \\
\hline Nouri & \(\varepsilon\) & L & iye & RF & iye & RF & & \\
\hline Poo & bo & & mepi & RH & memi & RH & mopu،
bepe & RH \\
\hline Sumo & newo & & nepey & & nemey & & \[
\begin{aligned}
& \text { nomp } w \text { ) } \\
& \text { neplepo }
\end{aligned}
\] & \\
\hline Ramo & - & & \(\mathrm{n} \in \mathrm{pi}\) & & nemi & & \begin{tabular}{l}
nopu' \\
nepu
\end{tabular} & \\
\hline Barupu & bos & H & mepi & RH & memi & RH & \[
\begin{aligned}
& \text { mopur } \\
& \text { bepe }
\end{aligned}
\] & \[
\begin{aligned}
& \mathrm{RH} \\
& \mathrm{HH}
\end{aligned}
\] \\
\hline Warapu \({ }_{\text {DCL }}\) & - & & mepi & & mem & & mopu & \\
\hline & we & & ib & & ab & & pi & \\
\hline
\end{tabular}


\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & & & & & & & & \\
\hline & they & & bird & & wing & & egg & \\
\hline Sekou \({ }_{\text {GALIS }}\) & te & & tân & & tân-fâ & & ku & \\
\hline Tumawo \({ }_{\text {CLV }}\) & të & & tãã, tãngã & & & & tã kò & \\
\hline Skou MARK & te & L & tig & H & fag & H & tegu & HF \\
\hline Sangke & te & & tei & & vaghi & & kuèkuè & \\
\hline Nyao & & & & & & & & \\
\hline Wutung \({ }_{\text {WP }}\) & & & & & & & túngbeghú & \\
\hline Wutung PNG & \(\mathrm{d} \varepsilon\) & & fi & F & fí fax & FL & fig & HF \\
\hline Dumo & de & L & dic & H & ¢ & F & i & F \\
\hline Dumombr & de & H & dic & F & dï ¢a & FL & & \\
\hline Dusur & de & & dir & F & dï pay & FL & dï Jit & FF \\
\hline Leitre & dik & & dex & F & depas & HL & demo & HL \\
\hline & & & & & & & & \\
\hline & de & & d(ai) & & fay & & k & \\
\hline
\end{tabular}




\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & & & & & & & & \\
\hline & \multicolumn{2}{|l|}{worm} & \multicolumn{2}{|l|}{mosquito} & \multicolumn{2}{|l|}{louse} & \multicolumn{2}{|l|}{leech} \\
\hline I'saka & aluy xx & RL & wayali & \[
\begin{aligned}
& \text { LL } \\
& \text { R }
\end{aligned}
\] & 雪 & H & ana & LH \\
\hline Rawo & วกลี้ & HI & ype & H & nimbey & HI & ipi & MR \\
\hline Puare & momp & FL & aike & IH & ni(waka) & Hx & pwe & R \\
\hline Womo & gusu & HF & mundege & & nipi & FL &  & \\
\hline Sumararu & mindrk & & gus & & & H & yipi & \[
\begin{aligned}
& \mathrm{Mr} \\
& \mathrm{R}
\end{aligned}
\] \\
\hline Nouri & - & & namen & LFL & mi & H & - & \\
\hline Poo & wraw & HW & E & W & mi & W & totain & WL \\
\hline Sumo & und & LL & \(\underline{E}\) & F & mi & H & amua & FL \\
\hline Ramo & utau & LRF & Ei & L & mi & H & mua & D \\
\hline Barupu & mini rau & FLL & E & W & mi & H & mo & W \\
\hline Warapu \({ }_{\text {DCL }}\) & - & & ee & & mi & & - & \\
\hline & \% utau & & -ge/e & & nip / mi & & ripi/mue. & \\
\hline
\end{tabular}

\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & & & & & & & & \\
\hline & \multicolumn{2}{|l|}{crocodile} & \multicolumn{2}{|l|}{cassowary} & \multicolumn{2}{|l|}{ant} & \multicolumn{2}{|l|}{cuscus} \\
\hline I'saka & Walĕpi & LH & kasue & \[
\begin{aligned}
& \mathrm{HL} \\
& \mathrm{~F}
\end{aligned}
\] & mayaink & Lx & aluway & LLR \\
\hline Rawo & wum & F & 3yamB & I & dek & H & \%mo & LR \\
\hline Puare & balmu & IH & symbo & FH & leka, zala. & IH & gipsoha & \\
\hline Womo & ypini & & juwambe & \[
\begin{aligned}
& \mathrm{HF} \\
& \mathrm{~L}
\end{aligned}
\] & limi & & \#ma. & \\
\hline Sumararu & gin & H & \(\operatorname{sim} B\) & & 1min & H & yapmal & HHI \\
\hline Nouri & barma & \[
\begin{aligned}
& \text { FLf } \\
& \mathrm{Lf}
\end{aligned}
\] & nirwoma & FL & misi & HL & rawiti ei & Lx \\
\hline Poo & pupu & HH & biyo & FL & mon & FL & abara & LHL \\
\hline Sumo & porme, pupu & \[
\begin{aligned}
& \mathrm{RF}, \\
& \mathrm{HH}
\end{aligned}
\] & biys & HL & kai & L & apare & LFL \\
\hline Ramo & moreva, kapon & & ayiri & \[
\begin{aligned}
& \mathrm{LH} \\
& \mathrm{~L}
\end{aligned}
\] & kai & D & apara & LFL \\
\hline Barupu & kapo, monima & \[
\begin{aligned}
& \mathrm{LL}, \\
& \mathrm{LF} \\
& \mathrm{~L} \\
& \hline
\end{aligned}
\] & bis & HL & mon & FL & apar & LL \\
\hline Warapu \({ }_{\text {DCL }}\) & kapu. & & biu. & & omoin & & apara. & \\
\hline & gin / kapon & & 3पamb/bio & & lim/deka & & ra-mol apara. & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & & & & & & & & \\
\hline & crocodile & & cassowary & & ant & & cuscus & \\
\hline Sekou \(_{\text {GALIS }}\) & menew & & tanre & & & & & \\
\hline Tumawo \({ }^{\text {clv }}\) & mönö & & tãrü & & & & & \\
\hline Skou MARK & आun & HF & tigy & LH & la & L & puba & HF \\
\hline Sangke & mene & & tensi & & & & & \\
\hline Nyao & & & & & & & & \\
\hline WutungwP & & & & & & & & \\
\hline Wutung \({ }_{\text {PNG }}\) & manu & HL & fisi & HH & Sibluc & HL & sumejpin. & HH \\
\hline Dumo & munu & HF & dïzi & HL & Ii & H & 3inc & HF \\
\hline Dumombr & & & & & & & & \\
\hline Dusur & minis/mumim & HF & dïsi & HF & Ii & L & somis & LF \\
\hline Leitre & mons & HL & dexsi & HL & kine & F & sii. & F \\
\hline & & & & & & & & \\
\hline & आu|x|y & & dä & & & \[
\begin{aligned}
& \text { har } \\
& \mathrm{d}
\end{aligned}
\] & 30i-plu /-ne & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & & & & & & & & \\
\hline & \multicolumn{2}{|l|}{\begin{tabular}{l}
tree \\
kangaroo
\end{tabular}} & \multicolumn{2}{|l|}{wallaby} & \multicolumn{2}{|l|}{tree} & \multicolumn{2}{|l|}{bark} \\
\hline I'saka & ansi & Lx & asas & RL & tei & R & teita. & RH \\
\hline Rawo skemB e & yipchame & & yipekwaka & & WIO & I & WTo 13i & IH \\
\hline Womo & 型 3kwambe & & Zibaike & & wa & F & Wralisi & \\
\hline Sumararu &  & & pkek & Lf & wa & L & walis & IL \\
\hline Nouri & raw & & & & ai & H & ai nisi & HHL \\
\hline Poo & kome & HH & aypora & LHL & ay & F & ay taw & LW \\
\hline Sumo & babisu & LHF & marow & & ai & F & aitepa & FLL \\
\hline Ramo & rapitu & RHL & mairove & & ai & F & ainiti & FLL \\
\hline Barupu & rapiou. & LHL & Bivuru. & LFL & ai & L & aita. & LF \\
\hline Warapu \({ }_{\text {dCL }}\) & ai your & & - & & ai & & ai tau & \\
\hline & (ra)-skamb & & (ra)-pkak & & wro/ai & & Wro lisi & \\
\hline
\end{tabular}

\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & & & & & & & & \\
\hline & leaf & & \multicolumn{2}{|l|}{roots} & \multicolumn{2}{|l|}{thorn} & \multicolumn{2}{|l|}{seed} \\
\hline I'saka & \(32 y\) & F & pou & L & da & R & yau & L \\
\hline Rawo & ye & R & akun & MH & 31 & F & y & F \\
\hline Puare & wohe & LI & wrom & II & phuku. & MH & \(3 i\) & F \\
\hline Womo & ei & F & ulu & & 31 & I & 3 i & F \\
\hline Sumararu & wai & I & walepu & \[
\begin{aligned}
& \hline \text { FL } \\
& \mathrm{L} \\
& \hline
\end{aligned}
\] & wasu & \[
\begin{aligned}
& \hline \text { LfL } \\
& \mathrm{f} \\
& \hline
\end{aligned}
\] & 3 i & F \\
\hline Nouri & aipe & HL & - & & - & & aisi & HF \\
\hline Poo & ауре & LW & kaka. & LL & ayere & HH & ay mentan & \\
\hline Sumo & PI & F & U10. & LL & kin & HH & iri & HH \\
\hline Ramo & pe & D & גו & \[
\begin{aligned}
& \mathrm{FL} \\
& \mathrm{~L} \\
& \hline
\end{aligned}
\] & II & HH & iri & HH \\
\hline Barupu & aipe & LW & aika & LF & aimi & HH & iri & HL \\
\hline Warapu \({ }_{\text {DCL }}\) & ai pei & & - & & - & & - & \\
\hline & & & (u) 10 & & 3 i & & (3i) & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & & & & & & & & \\
\hline & leaf & & roots & & thorn & & seed & \\
\hline Sekou \(_{\text {GALIS }}\) & riha & & & & & & & \\
\hline Tumawo clv & rihà & & rikãlé~ & & & & & \\
\hline Skou MARK & riha & HL & ha゙li & LL & 13 & L & nito & HL \\
\hline Sangke & hriè & & & & & & & \\
\hline Nyao & & & & & & & & \\
\hline Wutung \({ }_{\text {WP }}\) & hiseli he & HFL & & & & & & \\
\hline Wutung \({ }_{\text {PNG }}\) & & & alï & DM & & & & \\
\hline Dumo & tati \(\varepsilon\) & HF F & taticli & HFFL & tatic & HF F & tatidu & HF F \\
\hline Dumombr & tati \(\varepsilon\) & HLF & & & & & yadu & LF \\
\hline Dusur & dzae & HrF & qeli & FL & ebunabae & LHHF & du & F \\
\hline Leitre & teti \(\epsilon\) & \[
\begin{aligned}
& \text { LH } \\
& \text { H }
\end{aligned}
\] & b & F & ke & H & tetidu & LH F \\
\hline & & & & & & & & \\
\hline & tlEti hE & & İ/geli & & keb)(0) & & du & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & & & & & & & & \\
\hline & betel nut & & \multicolumn{2}{|l|}{betel pepper} & \multicolumn{2}{|l|}{lime} & \multicolumn{2}{|l|}{coconut} \\
\hline I'saka & pug & L & pol & L & pisa & LL & 33 & F \\
\hline Rawo & is & M & Ener & HM & 年 & M & wal & L \\
\hline Puare & wsi & F & ne & I & apu & HI & mle & F \\
\hline Womo & ves & & ne & F & aupo & FR & lu & \\
\hline Sumararu & wis & H & na. & Lf & ap & H & du & L \\
\hline Nouri & basi & HL & nai & H & aju & IL & ana & RL \\
\hline Poo & mutu. & HH & yare & HH & boy & W & ne & H \\
\hline Sumo & mutu & HH & tjare & LR & bai & F & III & F \\
\hline Ramo & muxu. & HH & tjare & LR & bai & D & neir & RF \\
\hline Barupu & muto & FL & yairi & \[
\begin{aligned}
& \text { LH } \\
& \text { H }
\end{aligned}
\] & boi & LH & ne & L \\
\hline Warapu \({ }_{\text {DCL }}\) & mutu & & yar & & bui & & ni & \\
\hline & bisi & & ne. & & apu & & walut & \\
\hline
\end{tabular}

\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & & & \multirow[b]{2}{*}{salt} & & \multirow[b]{2}{*}{cassava} & & & \\
\hline & banana & & & & & & \multicolumn{2}{|l|}{breadfruit} \\
\hline I'saka & Wi & F & - & & tayp & LL & nops/dei & LF, R \\
\hline Rawo & Wu & I & 3amBil & MH & neina & FH & 0, 揵p & F \\
\hline Puare & wo & I & mwe & F & - & & ho, wraipi & H \\
\hline Womo & wa & F & mowe & F & wolwa & ML & - / pizai & R/FR \\
\hline Sumararu & wa & Lf & - & & - & & 9/waip & F/F \\
\hline Nouri & mbo & H & rai & H & - & & bepa & HL \\
\hline Poo & opon & LF & (naw) & & ay ka & LW & kwaro, aym & xxxx \\
\hline Sumo & apon & LF & muts & HL & ai & \[
\begin{aligned}
& \mathrm{FL} \\
& \mathrm{~L} \\
& \hline
\end{aligned}
\] & apo, \(\mathrm{aim}_{0}\) & \[
\begin{aligned}
& \mathrm{FL}, \\
& \mathrm{RL} \\
& \hline
\end{aligned}
\] \\
\hline Ramo & opon & FL & naw(wi) & RL & ai & \[
\begin{aligned}
& \hline \text { FL } \\
& \mathrm{L} \\
& \hline
\end{aligned}
\] & apo,airs & \[
\begin{aligned}
& \mathrm{HL}, \\
& \text { RL }
\end{aligned}
\] \\
\hline Barupu & apon & LF & - & & awaika & \[
\begin{aligned}
& \hline \mathrm{LL} \\
& \mathrm{~W} \\
& \hline
\end{aligned}
\] & awo, air & \[
\begin{aligned}
& \mathrm{HL}, \\
& \mathrm{RL}
\end{aligned}
\] \\
\hline Warapu \({ }^{\text {DCL }}\) & apon & & nau & & - & & & \\
\hline & wa & & & & & & o/paipi & \\
\hline
\end{tabular}

\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & & & & & & & & \\
\hline & taro & & \multicolumn{2}{|l|}{sweet potato} & \multicolumn{2}{|l|}{sago tree} & \multicolumn{2}{|l|}{papeda / tanim} \\
\hline I'saka & 2p300 & & - & & 31 & F & 30 & F \\
\hline Rawo & - & & bwhom & F & \(\bigcirc\) & I & \(\underline{0}\) & I \\
\hline Puare & gake. & FH & W|umu & HL & pwo & I & \(\varepsilon\) & L \\
\hline Womo & dele & FL & wolo & FL & p & F & ai & \\
\hline Sumararu & welmbwes & HI & wal] & & \(\mathrm{F}(\mathrm{w}) \mathrm{O}\) & I & a & H \\
\hline & & & & & & & & \\
\hline Nouri & - & & buaw & HI & - & & - & \\
\hline Poo & ito & HH & tupay & HL & oy & W & rati & HH \\
\hline Sumo & \% & H & & & \%i & F & apote & \[
\begin{aligned}
& \mathrm{LH} \\
& \mathrm{~L} \\
& \hline
\end{aligned}
\] \\
\hline Ramo & itis & HH & bwo & L & ai & F & tati & HL \\
\hline Barupu & itis & LL & wintakei, tupai & & oi & L & rati & HL \\
\hline Warapu \({ }_{\text {DCL }}\) & itu, & & tupai & & oi & & - & \\
\hline & daka. & & wralum & & Pwo & & & \\
\hline
\end{tabular}
\(\left.\begin{array}{|l|l|l|l|l|l|l|}\hline & & & & \\ \hline & \text { taro } & & & \begin{array}{l}\text { sweet } \\ \text { potato }\end{array} \\ \text { tanim }\end{array}\right]\)
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & \multicolumn{2}{|l|}{bamboo} & \multicolumn{2}{|l|}{\[
\begin{aligned}
& \begin{array}{l}
\text { kunai) } \\
\text { grass }
\end{array} \\
& \hline
\end{aligned}
\]} & \multicolumn{2}{|l|}{rattan} & \multicolumn{2}{|l|}{soil} \\
\hline I'saka & yau. & R & susup & FF & bey & L & duwe & RH \\
\hline Rawo & is & Lf & npa & F & al & H & \begin{tabular}{l}
bodul \\
bluwn
\end{tabular} & LL \\
\hline Puare & mo(wsi) & I & ksa & & ha & F & bie & FL \\
\hline Womo & 131. & FL & ksuwase & & ale & ML & dyoli & \\
\hline Sumararu & wis & F & mark & I & al & I & gowli & LF \\
\hline Nouri & - & & - & & more & HL & rey & I \\
\hline Poo & bara & LL & yowma & FH & ine & FL & meri & WL \\
\hline Sumo & mane & FL & yakama & HFL & yari & F & mari & FH \\
\hline Ramo & cura & FL & riya & HH & ii & H & kera. & RL \\
\hline Barupu & aura, inei & & & & mati & FL & meri & LH \\
\hline Warapu \({ }_{\text {DCL }}\) & boio & & buus & & maxi & & meri & \\
\hline & wis & & ksuwa/ ypomg & & al & & lehi / j wrli & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & & & & & & & & \\
\hline & bamboo & & (kunai) grass & & rattan & & \multicolumn{2}{|l|}{soil} \\
\hline \multicolumn{9}{|l|}{Sekou \(_{\text {GALIS }}\)} \\
\hline Tumawo \({ }_{\text {CLV }}\) & pú~ & & & & & & fít & \\
\hline Skou MARK & piĩ, \({ }^{\text {a }}\) & F & ta & H & ari & HH & fiṫ] & HL \\
\hline \multicolumn{9}{|l|}{Sangke} \\
\hline \multicolumn{9}{|l|}{Nyao} \\
\hline Wutung \({ }_{\text {WP }}\) & & & & & & & híta & \\
\hline Wutung \(_{\text {PNG }}\) & iliz & FL & Pu(\%)u & FL & Eniez & FL & & \\
\hline Dumo & biù & F & & & Ene & FL & a & F \\
\hline Dumombr & & & & & & & 回 & F \\
\hline Dusur & hiil & F & le & L & ene & HF & \(\pm\) & L \\
\hline Leitre & i & F & \(\underline{l}\) & L & Eni & FL & 9 & H \\
\hline & & & & & & & & \\
\hline & pit & & tle & & e-ti/ni & & G & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & & & & & & & & \\
\hline & stone & & \multicolumn{2}{|l|}{sand} & \multicolumn{2}{|l|}{beach} & \multicolumn{2}{|l|}{mud} \\
\hline I'saka & yoko & LL & pup & LL & wi pup & RL & \begin{tabular}{l}
duwe \\
tiblakay
\end{tabular} & \[
\begin{aligned}
& \mathrm{RH} \\
& \mathrm{Lx}
\end{aligned}
\] \\
\hline Rawo & 3 SII & HM & unu/ \(/\) an & & - & & bosemBi & HLH \\
\hline Puare & 30 & F & unu & FH & mwans & FH & befela & F \\
\hline Womo & 30 & F & gyese & & moin & &  & \\
\hline Sumararu & 30 & I & mpwos & F & 36 mpmos & HF & - & \\
\hline & & & & & & & & \\
\hline Nouri & nane & HL & tace & FL & raiyu & HF & - & \\
\hline Poo & akayi & & tayre, rameta & & naw & & piroto & LHH \\
\hline Sumo & nyare & FL & tine & RL & - & & min bolera. & HHF \\
\hline Ramo & nane & LL & nemata. & \[
\begin{aligned}
& \hline \text { LF } \\
& \text { L }
\end{aligned}
\] & \% & F & k. piyoto & RLL \\
\hline Barupu & akairi & \[
\begin{aligned}
& \text { LH } \\
& \text { L }
\end{aligned}
\] & rameta. taire & & yiun & F & meri tron & \\
\hline Warapu \({ }_{\text {dCL }}\) & abairi & & tairi & & - & & - & \\
\hline & 30 & & unu. & & mwan & & r--1 & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & & & & & & & & \\
\hline & stone & & sand & & beach & & mud & \\
\hline Sekou \(_{\text {GALIS }}\) & wung & & & & & & & \\
\hline Tumawo clv & wiì & & háto & & & & & \\
\hline Skou MARK & wit & F & hâtu & LF & bá & H & fi & \\
\hline Sangke & konghu & & & & & & & \\
\hline Nyao & & & & & & & & \\
\hline Wutungwp & wõngnэ & & & & & & & \\
\hline Wutung \({ }_{\text {PNG }}\) & & & & & & & & \\
\hline Dumo & 2wữ & F & odu & LF & 23 & HF & ida i \(^{\text {i }} \mathrm{L}\) i & \[
\begin{aligned}
& \mathrm{LL} \\
& \mathrm{HH} \\
& \hline
\end{aligned}
\] \\
\hline Dumombr & h阝iij & L & odu & LF & & & & \\
\hline Dusur & \(\mathrm{H}_{6} \mathrm{~F}^{\text {a }}\) & F & odu. & LF & Oh\% & HL & ida & HF \\
\hline Leitre & kwonu & HL & จdu. & HF & IRE & HL & ida & HF \\
\hline & & & & & & & & \\
\hline & kwonu & & hotu & & (0ke) & & ida fifi & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & & & \multirow[b]{2}{*}{sea} & & \multirow[b]{2}{*}{river} & & \multicolumn{2}{|l|}{\multirow[b]{2}{*}{lake}} \\
\hline & water & & & & & & & \\
\hline I'saka & wi & F & wi & R & wi & F & - & \\
\hline Rawo & ni & I & 3amBil & MH & ni & I & ni & I \\
\hline Puare & fii & H & mwe & F & Fifio & HL & ulu & FH \\
\hline Womo & i & F & mowe & & idyunoms & & - & \\
\hline Sumararu & i & H & 3 a & H & i & H & - & \\
\hline Nouri & pi & H & rai & H & pi & H & pi & H \\
\hline Poo & pi & R & naw & L & pi & R & pije & LH \\
\hline Sumo & pi & H & nampe & HF & pi maka & & pi mors & LHH \\
\hline Ramo & pi & R & nau & F & pi pak & LL & pi ayovai tei & \\
\hline Barupu & pi & H & na, nau & L & raka & LL & pijei & HF \\
\hline Warapu \({ }_{\text {DCL }}\) & pi & & na & & un & & pi vei & \\
\hline & i/pi & & moe, za- & & & & & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & & & & & & & & \\
\hline & water & & sea & & river & & lake & \\
\hline Sekou \(_{\text {GALIS }}\) & pâ, pà & & & & pânero & & & \\
\hline Tumawo \({ }_{\text {CLV }}\) & pa & & & & & & & \\
\hline Skoumark & pa & L & \[
j \bar{j}, \mathrm{i}, 1 \bar{l}
\] & \[
\begin{aligned}
& \hline \mathrm{H}, \\
& \mathrm{H}, \\
& \mathrm{LL} \\
& \hline
\end{aligned}
\] & paliel & LL & pato & LL \\
\hline Sangke & tjà & & & & tjahù & & & \\
\hline Nyao & & & & & & & & \\
\hline Wutung \({ }_{\text {WP }}\) & tje & F & li & L & tje humiti & & & \\
\hline Wutung \(_{\text {PNG }}\) & & & 3 a & & & & & \\
\hline Dumo & da & L & li & L & da & L & - & \\
\hline Dumombr & da & H & li & L & & & & \\
\hline Dusur & da & L & li & L & da & L & & \\
\hline Leitre & ba & L & wabi & HL & ba & L & ba & L \\
\hline & & & & & & & & \\
\hline & 9wa & L & tli & & 9wa & & 9wa & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & & & & & & & & \\
\hline & \multicolumn{2}{|l|}{cloud} & \multicolumn{2}{|l|}{rain} & \multicolumn{2}{|l|}{sky} & \multicolumn{2}{|l|}{wind} \\
\hline I'saka & kow & F & pi & F & kow & F & tey & F \\
\hline Rawo & & & ampe & MH & boskulu & \[
\begin{aligned}
& \mathrm{HM} \\
& \mathrm{H} \\
& \hline
\end{aligned}
\] & u & H \\
\hline Puare & 10, 30k & I & fiepti & HR & 3kuru & LR & fur & F \\
\hline Womo & phu & F & บsu & FL & supwob & \[
\begin{aligned}
& \mathrm{HF} \\
& \mathrm{~L}
\end{aligned}
\] & u & F \\
\hline Sumararu & yosk(w)ok & LF & wis & I & 3krepom & Hx & 1 l & F \\
\hline Nouri & - & & a Fipa & \[
\begin{aligned}
& \mathrm{LH} \\
& \mathrm{~L} \\
& \hline
\end{aligned}
\] & - & & Fu & F \\
\hline Poo & - & & a & H & - & & pu & W \\
\hline Sumo & vte & HL & bo & L & ute & FL & pu & F \\
\hline Ramo & ute & HL & a & H & (ute) & HL & Pu & D \\
\hline Barupu & akwinn. ampers & & a & R & bokmini & Lx & Fu & W \\
\hline Warapu \({ }_{\text {DCL }}\) & - & & as & & - & & puu & \\
\hline & pu & & (wis) & & bs-skwolu & & pu & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & \multicolumn{2}{|l|}{} & \multirow[b]{2}{*}{rain} & & \multirow[b]{2}{*}{sky} & & \multirow[b]{2}{*}{wind} & \\
\hline & cloud & & & & & & & \\
\hline \(\mathrm{Sekou}_{\text {GALIS }}\) & & & fuh & & & & fô & \\
\hline Tumawo \({ }_{\text {CLV }}\) & & & ifo & & & & & \\
\hline Skou MARK & a & L & fu. & L & pitã & HL & fe & H \\
\hline Sangke & & & werò & & & & fe & \\
\hline Nyao & & & & & & & & \\
\hline Wutungwp & 2 & & f\# & & & & fe & \\
\hline Wutung \({ }_{\text {PNG }}\) & & & fi & DM & & & & \\
\hline Dumo & adu & HF & 偅 & H & a & L & \(\Phi^{\underline{E}}\) & H \\
\hline Dumombr & a & L & & & adu. & LF & p & H \\
\hline Dusur & a & Mf & piz & L & a bidu & \[
\begin{aligned}
& \hline \mathrm{LH} \\
& \mathrm{~F} \\
& \hline
\end{aligned}
\] & pe & Hf \\
\hline Leitre & du & H & po & F & a & H & yaku & HF \\
\hline & adu) & & fror & & 8(du) & & fe & H \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & \multicolumn{2}{|l|}{sun} & \multicolumn{2}{|l|}{moon} & \multicolumn{2}{|l|}{night} & \multicolumn{2}{|l|}{star} \\
\hline I'saka & du. & F & aw & F & kisi & LL & yerye & LL \\
\hline Rawo & as & M & ul & H & bosit & HF & dame & FR \\
\hline Puare & mwo & F & maipi & FM & dyosu & FL & fio & F \\
\hline Womo & טmu & LR & ipi & FL & weite & FL & gei & F \\
\hline Sumararu & wn & F & ip & H & yosyom & IH & pike. & HH \\
\hline Nouri & uma & LL & una. & LL & rop & HL & ranepe & FLL \\
\hline Poo & 1 mb & LL & was & FL & nors & HH & akams & LW \\
\hline Sumo & wno & HL & ura & FL & 100 & HH & ainin \({ }^{75}\) & HF \\
\hline Ramo & 10 mo & HL & ura & HL & 1017 & HH & kamo, biriu & \[
\begin{aligned}
& \hline \text { FR, } \\
& \text { LHL }
\end{aligned}
\] \\
\hline Barupu & 1 ma & FL & wa & FL & 1005 & LL & kams & LW \\
\hline \multirow[t]{2}{*}{Warapu \({ }_{\text {DCL }}\)} & 1mo & & wa & & גירנדי & & kamus & \\
\hline & 1-ma & & ipi, u-( ml\()^{\text {l }}\) & & yos- & & & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & & & & & & & & \\
\hline & sun & & moon & & night & & star & \\
\hline Sekou \(_{\text {GALIS }}\) & ráh & & kéi & & & & & \\
\hline Tumawo \({ }_{\text {clv }}\) & rãã & & ke & & & & há & \\
\hline Skou MARK & rax & H & ki & L & rapa & HL & ha. & L \\
\hline Sangke & hnà & & hé & & & & & \\
\hline Nyao & & & & & & & & \\
\hline Wutungwp & & & & & & & & \\
\hline Wutung \({ }_{\text {PNG }}\) & & & & & & & & \\
\hline Dumo & tax & H & 2 & L & mlax & L & \(\square\) & L \\
\hline Dumombr & tis & H & he & F & & & \(\square\) & L \\
\hline Dusur & ti & H & 搨 & F & mlax & F & эрере & HFL \\
\hline Leitre & tic & H & \(\underline{\text { g }}\) & H & koma & HF & -gu & HL \\
\hline & & & & & & & & \\
\hline & t & & g(ic) & & mlar & & ho & \\
\hline
\end{tabular}

75 Possibly related to One (mountains varieties) onime 'moon'.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & & & & & & & & \\
\hline & \multicolumn{2}{|l|}{fire} & \multicolumn{2}{|l|}{smoke} & \multicolumn{2}{|l|}{ashes} & \multicolumn{2}{|l|}{forest} \\
\hline I'saka & i & H & ti wne & HLx & ti sow & HF & \begin{tabular}{l}
\[
\mathrm{Fu}
\] \\
weysaw
\end{tabular} & \[
\begin{aligned}
& \hline \mathrm{L}, \\
& \mathrm{RL} \\
& \hline
\end{aligned}
\] \\
\hline Rawo & el(u) & F & alow & HF & glias & FH & bwasa & FR \\
\hline Puare & \(\checkmark\) & H & asko & FH & kupu & HL & wafen & \[
\begin{aligned}
& \mathrm{HF} \\
& \mathrm{~L} \\
& \hline
\end{aligned}
\] \\
\hline Womo & \(\square\) & F & sepei & HF & mwargo & & kasomo & \\
\hline Sumararu & a & Lfc & sepka & HLf & a muay & HLf & yokns & HLf \\
\hline Nouri & 0w & F & - & & - & & - & \\
\hline Poo & ay yeraw & LFL & ay uwo & FHL & Okuku & Hx & uka & HF \\
\hline Sumo & aku & LF & tou & L & apuku & LHF & uke & FL \\
\hline Ramo & aikera & FRH & ajupo & LL & aumo & LFL & uwa & FL \\
\hline Barupu & aikera & LFL & ai ya upu & & ai ms & LH & uka & LL \\
\hline Warapu \({ }_{\text {DCL }}\) & aikire. & & ai uwo & & ai kukumo & & \begin{tabular}{l}
meri \\
qumemant
\end{tabular} & \\
\hline & 0/0/ra & & 2-3k & & (muatp) & & (kVs) & \\
\hline
\end{tabular}



\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & & & & & & & & \\
\hline & \multicolumn{2}{|l|}{village} & \multicolumn{2}{|l|}{fence} & \multicolumn{2}{|l|}{rope} & \multicolumn{2}{|l|}{canoe} \\
\hline I'saka & 1 & H & yol & R & bey & L & - & \\
\hline Rawo & bwol & H & - & & al & I & mbuk & I \\
\hline Puare & w & F & 31 & L & 开 & L & 安iri & FH \\
\hline Womo & woms & FL & whok & FR & are & FR &  & FH \\
\hline Sumararu & nduk & H & bakky & LH & al & I & - & \\
\hline & & & & & & & & \\
\hline Nouri & - & & - & & - & & yope & IL \\
\hline Poo & om & HH & ika & WL & i & W & poro, wa & Hx \\
\hline Sumo & kurowo & \[
\begin{aligned}
& \text { LF } \\
& \text { L }
\end{aligned}
\] & Opu & HH & ti & H & poi & FL \\
\hline Ramo & mo & F & bu & D & tir & H & pars & FR \\
\hline Barupu & boku. & LR & t & W & rei & R & puins, wa & Lx \\
\hline Warapu \({ }_{\text {DCL }}\) & - & & - & & - & & pom, bua. & \\
\hline & -w-1- & & 1-k & & ar & & yope & \\
\hline
\end{tabular}



\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & & & & & & & & \\
\hline & bow & & \multicolumn{2}{|l|}{arrow} & \multicolumn{2}{|l|}{knife} & \multicolumn{2}{|l|}{bag} \\
\hline I'saka & yey & F & pay & L & nine. & HL & pa & L \\
\hline Rawo & dek & I & rkil & R & repsyo & HL & i & I \\
\hline Puare & te & R & leke, ple & R & naine & HF & ti & H \\
\hline Womo & di & F & leke & FL & nama & & 䦽i & \\
\hline Sumararu & rpi & H & 16k & H & li (ksip) & H- & i & H \\
\hline Nouri & nims & LI & yote & IL & nein & HH & rye & I \\
\hline Poo & rwa & H & kokom & LW & aymon & LL & E & H \\
\hline Sumo & tuwa & HL & awap & Hx & ampito & \[
\begin{aligned}
& \mathrm{LL} \\
& \mathrm{H} \\
& \hline
\end{aligned}
\] & IWom & Lx \\
\hline Ramo & tuwa & HL & koko, eura & Lx & aimona & Lx & E & H \\
\hline Barupu & na & LL & kokom & \[
\begin{aligned}
& \mathrm{LL} \\
& \mathrm{H} \\
& \hline
\end{aligned}
\] & aimon & LL & ckwks, eu & Lx \\
\hline Warapu \({ }_{\text {DCL }}\) & nuine. & & - & & - & & ammai & \\
\hline & \(\mathrm{d} \varepsilon \mathrm{k}\) & & 18k & & nein & & i & \\
\hline
\end{tabular}

\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & & & & & & & & \\
\hline & above & & below & & in front & & \multicolumn{2}{|l|}{behind} \\
\hline I'saka & trey & R & 13 & R & saya & LL & kawe, kaye & \[
\begin{aligned}
& \mathrm{RH} \\
& \text { RL }
\end{aligned}
\] \\
\hline \multicolumn{9}{|l|}{Rawo} \\
\hline Puare & minu & & refie & & misa & & ku & \\
\hline Womo & nau & & plomia. & & & & & \\
\hline Sumararu & no & H & yal & L & & & ku. & R \\
\hline & & & & & & & & \\
\hline \multicolumn{9}{|l|}{Nouri} \\
\hline Poo & nabe & FH & pita. & HH & tja & L & pa. & H \\
\hline Sumo & nals & HH & pruta & HF & tia & HF & & \\
\hline \multicolumn{9}{|l|}{Ramo} \\
\hline Barupu & naks & & pike, pita. & & tja & & pa & L \\
\hline \multicolumn{9}{|l|}{Warapu \({ }_{\text {DCL }}\)} \\
\hline & & & & & & & & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & & & & & & & & \\
\hline & above & & below & & in front & & behind & \\
\hline Sekoughlis & & & & & & & & \\
\hline Tumawo \({ }_{\text {CLV }}\) & & & & & & & & \\
\hline Skou MARK & hola & HL & kF3 & LL & holo & HL & k+2] & HLL \\
\hline Sangke & & & & & & & & \\
\hline Nyao & & & & & & & & \\
\hline Wutung \({ }_{\text {WP }}\) & & & & & & & & \\
\hline Wutung \(_{\text {PNG }}\) & fi & DM & & & & & & \\
\hline Dumo & 主 & F & 呈 & F & b & F & ¢ق้ & H \\
\hline Dumombr & & & \% & HL & & & & \\
\hline Dusur & ter & F &  & HL & Gba & HL & (e) hive & HFL \\
\hline Leitre & & & & & & & & \\
\hline & & & & & & & & \\
\hline & & & diti-kiti & & hoom & & kH & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & & & & & & & & \\
\hline & inside & & \multicolumn{2}{|l|}{ouside} & \multicolumn{2}{|l|}{left} & \multicolumn{2}{|l|}{right} \\
\hline I'saka & tru. & F & duwe & RH & numi & LL & ayay & LL \\
\hline \multicolumn{9}{|l|}{Rawo} \\
\hline Puare & gmu & & lefe & & kalk & & fa & \\
\hline Womo & บmu & & & & & & & \\
\hline Sumararu & yomom & & & & nak & M & pi & H \\
\hline & & & & & & & & \\
\hline \multicolumn{9}{|l|}{Nouri} \\
\hline Poo & ari & HH & ириw\% & Lx & paiye & LL & niye & LF \\
\hline Sumo & mraw & HF & kimmunay & RF & pata & HLf & pewa & HH \\
\hline \multicolumn{9}{|l|}{Ramo} \\
\hline Barupu & ari & HL & 4pu & LH & apata & \begin{tabular}{l}
LH \\
L
\end{tabular} & awaba & \[
\begin{aligned}
& \mathrm{LH} \\
& \mathrm{~L} \\
& \hline
\end{aligned}
\] \\
\hline \multicolumn{9}{|l|}{Warapu \({ }_{\text {DCL }}\)} \\
\hline & & & & & & & & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & & & & & & & & \\
\hline & inside & & ouside & & left & & right & \\
\hline & & & & & & & & \\
\hline Sekou \(_{\text {GALIS }}\) & & & & & & & & \\
\hline Tumawo \({ }_{\text {CLV }}\) & & & & & & & & \\
\hline Skou MARK & ila & FL & pela & LL & na. & F & pa & F \\
\hline Sangke & & & & & & & & \\
\hline Nyao & & & & & & & & \\
\hline Wutung \({ }_{\text {WP }}\) & & & & & & & & \\
\hline Wutung \(_{\text {PNG }}\) & & & & & & & & \\
\hline Dumo & dune & HF & dui & HF & nune & F & nums & F \\
\hline Dumo \(_{\text {MDR }}\) & doev & LL & & & & & & \\
\hline Dusur & dine & HL & Glat & HL & nince & HL & num(o) & HL \\
\hline Leitre & & & & & & & & \\
\hline & & & & & & & & \\
\hline & diti-me & & diù-pV & & divi-ne & F & diti-mo & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & & & & & & & & \\
\hline & \multicolumn{2}{|l|}{black} & \multicolumn{2}{|l|}{white} & \multicolumn{2}{|l|}{red} & \multicolumn{2}{|l|}{yellow} \\
\hline I'saka & kisuk & Lx & irey & Lx & way & L & yapupe & Lx \\
\hline Rawo & (ab)ukel & HL & (ek)na & HR & (ekmbil & H & (ab) ban & F \\
\hline Puare & ausu, kulu & LR & nêhas & LH & ni & Hf & yako & FH \\
\hline Womo & kulu & FR & numbwa. & HL & insoms & HFL & 3lala & FH \\
\hline Sumararu & ku. & H & na. & I & in & H & yok & L \\
\hline Nouri & boquwto & LIL & ropu & HL & pio & HH & - & \\
\hline Poo & moke & LLH & buso & HH & briri & HH & ay pe tare & \\
\hline Sumo & ura & FL & buto & RL & iki & HH & -p & HH \\
\hline Ramo & ura & FL & busu & RL & biriri & FLL & Opo & HH \\
\hline Barupu & wa, moki & \[
\begin{aligned}
& \text { FL, } \\
& \text { LLH }
\end{aligned}
\] & awown,
busu & \[
\begin{aligned}
& \mathrm{Lx}, \\
& \mathrm{FL}
\end{aligned}
\] & briii & HH & Op & LL \\
\hline Warapu \({ }_{\text {DCL }}\) & wa & & butu. & & \[
\begin{aligned}
& \text { biri, } \\
& \text { breven }
\end{aligned}
\] & & - & \\
\hline & kupu & & na- / busu & & in/ bixin & & yok/ apo & \\
\hline
\end{tabular}


\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & & & & & & & & \\
\hline & all & & many & & one & & two & \\
\hline & & & & & & & & \\
\hline Sekou \(_{\text {GALIS }}\) & & & & & áli & & hintung & \\
\hline Tumawo \({ }_{\text {clv }}\) & & & & & & & hí~ち & \\
\hline Skou MARK & fata. & HF & nawo & LF & Bİ' & HL & hïtio & FL \\
\hline Sangke & & & & & ofa & & himu, himé & \\
\hline Nyao & & & & & & & & \\
\hline Wutungwp & & & & & afa & HL & huyoms & HL \\
\hline Wutung \({ }_{\text {PNG }}\) & & & & & & & & \\
\hline Dumo & & & Todi & FL &  & LL & yumono & LFL \\
\hline Dumombr & & & podi & LH & opa & FL & yumonu. & LLL \\
\hline Dusur & & & prodi & HL & opa & HL & dรumbini & LHL \\
\hline Leitre & - & & - & & эpa & HL & yumonu. & LLL \\
\hline & & & & & & & & \\
\hline & fodeli) & & & & (ofa) & & hypomodiu. & \\
\hline
\end{tabular}


\begin{tabular}{|l|l|l|l|l|}
\hline & & & & \\
\hline & seven & eight & twelve & 24 \\
\hline & & & & \\
\hline I'saka & & & & \\
\hline & & & & \\
\hline Rawo & & & & \\
\hline Puare & & & & \\
\hline Womo & & & & \\
\hline Sumararu & & & & \\
\hline & & & & \\
\hline Nouri & & & & \\
\hline Poo & & & & \\
\hline Sumo & & & & \\
\hline Ramo & & & & \\
\hline Barupu & & & & \\
\hline Warapu & & & \\
\hline & & & & \\
\hline
\end{tabular}

\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & & & & & & & & \\
\hline & big & & small & & old & & new & \\
\hline I'saka & nuo & LL & nayaw & LL & tori & Lx & no & F \\
\hline Rawo & rapla & LR & sepi/jo & \[
\begin{aligned}
& \mathrm{LR}, \\
& \mathrm{~L}
\end{aligned}
\] & yemB & F & 6esimi & \\
\hline Puare & ponwo & HR & mbansa. & FH & kulu & & \(3 \mathrm{se}^{76}\) & L \\
\hline Womo & dyunowo, bamowo & \[
\begin{aligned}
& \text { FL } \\
& \text { L }
\end{aligned}
\] & nekpi & FR & ¢ละก & FR & \#̇aise & FL \\
\hline Sumararu & mobil & IH & maije & RH & ant & L & as & L \\
\hline Nouri & muya & HL & tepeypey & LFF & nemani & LFL & 3ail & HL \\
\hline Poo & pako & HL & mentan & HH & tra. & HL & tare & LL \\
\hline Sumo & kokonai & Lx & mamayana. & Lx & tote. & HL & tari & FL \\
\hline Ramo & pakonai & Lx & mutan & LL & tutas. & RL & tari & FL \\
\hline Barupu & paks & LL & mutan & LL & tras & LF & tir & LL \\
\hline Warapu \({ }_{\text {DCL }}\) & paku & & mintan & & - & & tari & \\
\hline & prown & & -Ekpi & & & & saxi & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & & & \multirow[b]{2}{*}{small} & & \multirow[b]{2}{*}{old} & & \multicolumn{2}{|l|}{\multirow[b]{2}{*}{new}} \\
\hline & big & & & & & & & \\
\hline Sekou \(_{\text {GALIS }}\) & & & & & & & & \\
\hline Tumawo clv & mãki & & hápa & & & & nàt & \\
\hline Skou MARK & bapali & HFH & & & ris, toto & \[
\begin{aligned}
& \mathrm{L}, \\
& \mathrm{LH}
\end{aligned}
\] & nati, ifia & \[
\begin{aligned}
& \mathrm{HL}, \\
& \mathrm{LL}
\end{aligned}
\] \\
\hline Sangke & & & & & & & & \\
\hline Nyao & & & & & & & & \\
\hline WutungwP & & & & & & & & \\
\hline Wutung \(^{\text {PNG }}\) & hiuti & FL & hiile & FL & & & & \\
\hline Dumo & \[
\begin{aligned}
& \text { ya-jwo } \\
& \text { dupe }
\end{aligned}
\] & \[
\begin{aligned}
& \hline \text { LL / } \\
& \text { LF } \\
& \hline
\end{aligned}
\] & Wuela & LHL & be & F & 3 m & LL \\
\hline Dumo \(_{\text {MDR }}\) & (9a-) 31 & L & Buelo & LLL & 3be & LF & & \\
\hline Dusur & yas 30 & HL & Fuelo & HFL & yavo & HL & 6ino & HL \\
\hline Leitre & dame & HL & lemá & HL & mabe & HL & Tin & LH \\
\hline & & & & & & & & \\
\hline & & & velo & & be & & [u/o]pe - & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & & & & & & & & \\
\hline & \multicolumn{2}{|l|}{old (man)} & \multicolumn{2}{|l|}{young} & \multicolumn{2}{|l|}{hot} & \multicolumn{2}{|l|}{cold} \\
\hline I'saka & k & H & busie & Lx & ma & H &  & L \\
\hline Rawo & sara & FR & permul & FL & apip & LH & d马鉒pi & LH \\
\hline Puare & - & & - & & fiela & FH & kgi & FH \\
\hline Womo & nowo & LL & subliliti & LL & טיטpur & & Fwropupili & FLL \\
\hline Sumararu & pdek & Lf & stikli & HH & oppil. & FH & ap & Mh \\
\hline Nouri & nima. & HL & - & & ray iji & LHH & yone & HL \\
\hline Poo & yatotopo & LHx & mepopa & LHx & im & H & marii & LHx \\
\hline Sumo & apu & HL & toyop & LHL &  & HH & morini & FLL \\
\hline Ramo & ap & HL & biatari & Lx & oin, undinui & \[
\begin{aligned}
& \hline \mathrm{L}, \\
& \mathrm{Lx}
\end{aligned}
\] & morixi & FLL \\
\hline Barupu & arsputara & & meppa & LHL & -pui & LHL & -manici & \[
\begin{aligned}
& \text { LHH } \\
& \text { H }
\end{aligned}
\] \\
\hline Warapu \({ }_{\text {DCL }}\) & - & & - & & yin & & mariri & \\
\hline & & & (sü:liy) & & & & japi & \\
\hline
\end{tabular}

\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & \multicolumn{2}{|l|}{good} & \multicolumn{2}{|l|}{bad} & \multicolumn{2}{|l|}{sharp} & \multicolumn{2}{|l|}{blunt} \\
\hline I'saka & ey & F & play & L & ni sayo & Lx & tow & R \\
\hline Rawo & memBwal & LH & Bwal & L & isde. & HL & namgil & LI \\
\hline Puare & waingli & FR & dufieini & & ki & H & fiambo & \\
\hline Womo & kmwa & F & kompla. & & i & I & lumu & FL \\
\hline Sumararu & mem & H & lip & H & nain & R & napiok & \\
\hline Nouri & brayni & HL & nemani & LFL & - & & - & \\
\hline Poo & neman & RL & taypu & RL & ramay & HH & koku & HL \\
\hline Sumo & -naite & FL & -main & L & pepen & LR & kulumo & LHL \\
\hline Ramo & -naitei & FL & tepreu & HF & pepen & LR & aukukuma & \[
\overline{\mathrm{LLH}}
\] \\
\hline Barupu & -ricpai & & -taip & LHL & -rami & & -ckoku & \\
\hline \multirow[t]{2}{*}{Warapu \({ }_{\text {DCL }}\)} & neman & & taipu & & - & & - & \\
\hline & & & & & kis- ? & & -mi & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & & & & & & & & \\
\hline & good & & bad & & sharp & & blunt & \\
\hline & & & & & & & & \\
\hline Sekou \(_{\text {GALIS }}\) & & & & & & & & \\
\hline Tumawo \({ }_{\text {clv }}\) & & & & & & & & \\
\hline Skou MARK & hefe & HF & fe & F & tia & LH & top & LH \\
\hline Sangke & & & & & & & & \\
\hline Nyao & & & & & & & & \\
\hline Wutungwp & & & & & & & & \\
\hline Wutung \({ }_{\text {PNG }}\) & fí \(\varepsilon_{\text {, }}\) & LL & fi / fiel & L & & & & \\
\hline Dumo & गdi & HL & 程 & F & ladi & FL & las & LF \\
\hline Dumombr & & & \(\mathrm{p}^{\text {E }}\) & L & & & & \\
\hline Dusur & Ddi & HL & \(\mathrm{p}^{\text {E }}\) & L & la & L & tei & F \\
\hline Leitre & odi & HL & pii & F & lapiil & LF & lape & LL \\
\hline & & & & & & & & \\
\hline & (odi) & HL & fi & & -tla- & & [t/1]o & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & & & & & & & & \\
\hline & \multicolumn{2}{|l|}{near} & \multicolumn{2}{|l|}{far} & \multicolumn{2}{|l|}{wet} & \multicolumn{2}{|l|}{dry} \\
\hline I'saka & yoplow & LL & inopa & HL & wey & F & 3law & F \\
\hline Rawo & repi & FH & bobiki & MLL & niyu & FL & ilwapsă & \[
\begin{aligned}
& \mathrm{ML} \\
& \mathrm{Lr} \\
& \hline
\end{aligned}
\] \\
\hline Puare & sonde, to & \[
\begin{aligned}
& \mathrm{HL}, \\
& \mathrm{~L}
\end{aligned}
\] & Pwo & & - & & - & \\
\hline Womo & ndepi & HL & 4wo & L & fwendulu & & 30wo & IR \\
\hline Sumararu & kokpi & HM & ipwo & HLf & 3पF & & - & \\
\hline & & & & & & & & \\
\hline Nouri & - & & robaw & LI & - & & - & \\
\hline Poo & kaluke & Lx & ripipa & LHx & pitata & LHx & raj & HL \\
\hline Sumo & kakoro & LHH & rairi & RL & itoin & LH & barabarau & \[
\begin{aligned}
& \mathrm{HL} \\
& \mathrm{HF}
\end{aligned}
\] \\
\hline Ramo & kakui & LF & nipa & LHL & ituta & LHL & orope & LLF \\
\hline Barupu & -kule & HL & rarapa & LHH & pi-tata. & HL & -inje & RL \\
\hline Warapu \({ }_{\text {DCL }}\) & - & & - & & - & & - & \\
\hline & depi & & & & & & & \\
\hline
\end{tabular}

\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & & & & & & & & \\
\hline & \multicolumn{2}{|l|}{long} & \multicolumn{2}{|l|}{short} & \multicolumn{2}{|l|}{I see} & \multicolumn{2}{|l|}{I hear} \\
\hline I'saka & wolow & Lx & awpa & RL & d-eley & LL & - & \\
\hline Rawo & bomBwis & LM & 3wepi & LfM & banoro & LRL & nepa & LL \\
\hline Puare & po & & re & L & ne- & & & \\
\hline Womo & pol nowo & & 1815 & & in \(\mathrm{n}-\mathrm{z}-\mathrm{k}\) & & nop n-o-k & \\
\hline Sumararu & pupain & & 1 mBwo & & in nok & & n-nap & \\
\hline Nouri & baw & R & tepopey & HHF & n-5 & F & to n - i & IL \\
\hline Poo & ripiba & HHL & kakuke & LHL & & & & \\
\hline Sumo & ripiba & Lx & nukine. & Lx & bane-tjera & HL & - BJ & L \\
\hline Ramo & \[
\begin{aligned}
& \text { diripa~ } \\
& \text { dipa }
\end{aligned}
\] & Lx & kokem & LLF & ana-ripu & LL & -ku & L \\
\hline Barupu & ripipa & LHL & kubsin, kukurin & \[
\begin{aligned}
& \hline \text { L(L) } \\
& \mathrm{H} \\
& \hline
\end{aligned}
\] & kana-yara & HL & -iipu & LL \\
\hline Warapu \({ }_{\text {DCL }}\) & diva & & kukon & & yara. & & - & \\
\hline & (p/b) \({ }^{\text {a }}\) & & & & & & & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & & & & & & & & \\
\hline & long & & short & & I see & & I hear & \\
\hline Sekou \(_{\text {GALIS }}\) & & & & & fu & & & \\
\hline Tumawo clv & ekapé & & & & fo / fu~ & & & \\
\hline Skou MARK & ikate & LHL & rilele & HHH & ft (fu, fc ) & L & l & H \\
\hline Sangke & & & & & reh & & & \\
\hline Nyao & & & & & & & & \\
\hline Wutungwp & & & & & & & & \\
\hline Wutung \(^{\text {PNG }}\) & hilualwi & HL & hlefil & HL & hiilpua & LL & & \\
\hline Dumo & edi & FL & tome & LL & we & L & 13 & L \\
\hline Dumo \(_{\text {MDR }}\) & he & H & & & & & & \\
\hline Dusur & has /li & F/F & \(t 2\) & F & h pe & & & \\
\hline Leitre & debi/klas & HL & keji & HL & yowi & HL & kila & HL \\
\hline & & & & & & & & \\
\hline & kE & & tle 1 & & & & klim & \\
\hline
\end{tabular}

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\section*{Index}

\section*{13 Valency changing processes}

As with many, but by no means all, languages, there are a variety of morphosyntactic means of indicating that a verb is being used with more, or less, than the number of arguments that it subcategorises for in its lexical entry. There are no morphological devices for lowering the number of core arguments of a verb (passives or antipassives, reflexives or reciprocals), as is common in languages of New Guinea, but there are a number of ways of accomplishing these goals with periphrastic contructions or multi-verb predicates. A putative passive uses a complex periphrastic construction with serial verbs; the reflexive construction maximally uses nòe 'body' as a marker of reflexivity, though the only indication that the valency is other than canonically bivalent is that possessive marking on a subject-possessed body (or body part) may be omitted. The reciprocal construction too appears to be a subset of a normal construction of nominal coordination, but there are some small morphosyntactic possibilities that allow us to think of this as representing a separate morphosyntactic category of its own.

Periphrastic constructions are also used to indicate causation for most verbs, a valencyincreasing device, but applicatives have their own dedicated suffix, and so are the only valencychanging process that involves bound morphology. Partly this is definitional: an applicative must involve morphology on the verb, otherwise it is termed a serial verb construction (which is also a possibility that is realised in Skou, and discussed more in 12.4). Nonetheless, the applicative is interesting for genuinely having bound morphological instantiation (reflecting a proto-Skou morpheme *ha, with approximately the same meaning: applicative/dative), where the other valency changing devices do not.

These different constructions, while structurally quite diverse, are unified in the fact that they act as (clause-level) valency changing devices, and so are all treated together in this chapter.

\subsection*{13.1 Causatives}

There are no regular and completely productive morphological causative morphemes in Skou, a pattern that is typical of Papuan languages in general, where typically a range of semantically explicit resultative constructions are employed. The two most productive ways of forming monoclausal causatives are both analytical, using one of the verbs li 'say, 'do' and leng " 'give'", and having the base predicate appear following the verb, in the position used to encode obliques. Examples of each can be seen in (1) and (2), which show causative forms of base predicates which are monovalent and bivalent, respectively; (1)' and (2)' show the base predicate on which the causatives are built.
(1) Pe nì=li pe=ti-ti.

3SG.F 1SG=do 3SG.F=3SG.F.go-3SG.F.go
'I sent her.' (that is, 'I made her go.')
(1) \({ }^{\prime} \mathrm{Pe} \quad \mathrm{pe}=\mathrm{ti}\).

3SG.F 3SG.F=3SG.F.go
'She went.'
(2) Pe (ya) nì nì=leng \(p e=p\)-ang.

3SG.F thing 1SG 1SG=give 3SG.F=3SG.F-eat
'I fed her.'
(that is, 'I made her eat.')
(2)' Pe ya \(p e=p\)-ang.

3SG.F thing 3SG.F=3SG.F-eat
'She ate (something).'
We shall examine these two strategies, and other, more lexicalised, methods used to encode causation, in the following sections, starting with the most productive causatives formed with li 'do', and then looking at other analytical causatives formed with leng "give". Following this a short account of some of the lexicalised causative pairings will be discussed.

\subsection*{13.1.1 Biclausal causativisation with li 'do’}

In the absence of such a lexically suppletive form that marks the bivalent causation of a monovalent state, causation is most commonly expressed biclausally, with the general verb li 'do' as the causative verb. Other. The following example shown that the simple stative predicate fu 'be afraid' can be used either monovalently or bivalently, with the subject of the verb being in both cases the experiencer of the state.

Monovalent predicate, only experiencer \(S\)
\begin{tabular}{ll}
\(\mathrm{Ni}=\mathrm{fu}\) & i li. \\
1SG=afraid \\
'I'm afraid.'
\end{tabular}

Bivalent predicate, experiencer A and effector P:
\begin{tabular}{ll} 
Nì móenòeng nì=fu & i li. \\
1SG crocodile \(1 \mathrm{SG}=\) afraid & be do \\
'I'm afraid of crocodiles.'
\end{tabular}

An alternative, causative reading, 'scare' rather than 'fear', in which the experiencer is the sentence's notional object, and the effector of the fear is the subject, can be expressed with the addition of the causative li 'do', and a marker of switch reference (see 19.xx). This is shown in (5), with (6) added to show the different domains of agreement. Note that with the feminine noun móenòeng 'crocodile' as subject the verb must display the feminine form of li, tue. Clearly the li in (4) cannot be agreeing with the crocodile, but can only represent aspectual marking for the predicate fu 'afraid'.

Causative, A added
\begin{tabular}{llll} 
M óenòeng \(\quad\) pe=tue=ko & \(n \grave{=}=\mathrm{fu}\) & i li. \\
crocodile \(\quad\) 3SG. \(\mathrm{F}=3 \mathrm{SG} . \mathrm{F} . \mathrm{do}=\mathrm{OBV}\) & \(1 \mathrm{SG}=\) afraid & be do \\
'The crocodile scared me.' & &
\end{tabular}
\begin{tabular}{llll}
\(\mathrm{Ni}=\mathrm{li}=\mathrm{ko}\) & ku & \(\mathrm{ke}=\mathrm{fu}\) & \(\mathrm{i} \quad \mathrm{li}\). \\
1SG=do=OBV child & 3SG. \(\mathrm{NF}=\) afraid & be do \\
'I scared the child.' & &
\end{tabular}

We can model the different argument patterns seen in the sentences above with the diagram in table xx158. Here a line connecting an argument and a verb indicates that it is that argument which is the morphological subject of that verb.

Table 158. Correlations between monovalent, bivalent, and causative codings with li 'do'


Of these, only (5) and (6) represent instances of causativisation. Here the structure is that shown in (7), not (8).

\section*{Causative organisation}
```

li `\SUBJ, PRED <SUBJ\rangle>`

```
(8) \(* \mid i `\) 'SUBJ, OBJ PRED \(\langle\mathrm{SUBJ}\rangle\rangle ’\)

Note that there is no object for the main clause. That is, we cannot talk of nì 'me' in (5) being the object of the sentence, despite the English translation. A more grammatical-functions faithful translation might be 'The crocodile arranged matters so that I was afraid.', except that in Skou 'matters' is pleonastic. Evidence that there is no object for li comes from attempts to put pronominal objects in the object position in the matrix clause, as in the ungrammatical (8).


\section*{XXXXXXXXXXXX}

It is not true that all instances of verbs or predicates that employ li 'do' added are causative verbs. As will be discussed in more detail in chapter 14, there are plenty of nominal + verb predicates using the generic verb li 'do' as their inflecting component. While a full discussion of these \(\mathrm{N}+\mathrm{V}\) predicates will be deferred until the next chapter, we can mention the following different uses of li 'do' in predication, either as part of a simple predicate, or to add either a P or an A to an otherwise monovalent predicate.

Table 159. Lexical valency increase strategies
\begin{tabular}{|c|c|c|c|c|}
\hline & & INTR & (+A) & (+P) \\
\hline re & 'go' & go & do go & \\
\hline ráue há fu & ‘laugh' 'afraid' & laughter do afraid \({ }_{\text {ADJ }}\) & do afraidv & laughter hit afraidv \\
\hline
\end{tabular}

The relevance of these \(\mathrm{N}+\mathrm{V}\) predicates in a discussion of causation is that there is one class of verbs which show an absolute restriction from appearing in a causative construction formed with li 'do', and are presented in clearly biclausal sentences with switch reference between the cause and the effect, such as the following.


Here the complex predicate ang li 'do fish poison = poison fish' cannot be causativised with a li causative, since this lexical verb is already present in the simple non-causative predicate, and there is a constraint (an operation of the obligatory contour principle, forbidding adjacent like entities) that prevents identical verbs following each other. This means that (11) is ungrammatical.
\[
\begin{array}{llll}
\text { * ang } & \text { ne=ti-ti( }=\text { ko }) & \text { ke= } \mathrm{l}=\mathrm{ko} & \text { móe }  \tag{11}\\
\text { bing } \\
\text { fish.poison 1PL=1PL.do-RED=OBV } & \text { 3SG.NF=do=OBV fish } & \text { PL.die } \\
\text { 'He made us wring out the fish-poison roots to kill the fish.', }
\end{array}
\]

In order to causativise the clause in (10), we must use a separate clausal construction with a more semantically explicit verb, as in (12). In this sentence the verb lóeng 'say, tell' is a separate clause that is linked by switch reference morphology to the base predicate.
\begin{tabular}{llll} 
Ne te=r-íng=ko & ang & ne=ti-ti \\
1PL \(\quad\) 3PL=3PL-say.PL=OBV & fish.poison & 1PL=1PL.do-RED \\
(=ko móe bing). & & \\
=OBV fish PL.die & \\
'They told us to wring out the fish-poison roots (to kill the fish).'
\end{tabular}

Generally the li causative strategy cannot be used with lexically bivalent predicates. A construction such as (13) is thus ungrammatical, as mentioned above, and so are (14) and (15). Replacing te ti ko with te ríng ko (as in (12)) in these examples would make grammatical sentences.
* ne te=ti=ko ang \(\quad\) ne=ti-ti
1PL 3PL=3PL.do=OBV fish.poison
1PL=1PL.do-RED
'They told us to wring out the fish-poison roots.'
* ne te=ti=ko \(\quad\) ang \(\quad\) ne=yú-yú
1PL 3PL=3PL.do=OBV fish.poison 1PL=search.for-RED
'They told us to look for the fish-poison roots.'
\begin{tabular}{lll} 
* ne \(\quad\) te=ti=ko & naké & ne=jí-jí \\
1PL \(\quad\) 3pL=3pL.do=OBV & dog & 1PL=PL.hit-RED \\
'They told us to hit the dogs.'
\end{tabular}

Another example of the ungrammaticality of li as a causative with a bivalent predicate can be seen in the strongly rejected (16), in which the base predicate uses the verb li as well.
\begin{tabular}{llll} 
* ang & ne=ti-ti \((=k o)\) & ne=ti=ko & móe \\
fish.poison & (te=)bìng \\
1PL=1PL.do-RED=OBV & 1PL=1PL.do=OBV & fish & 3PL=PL.die
\end{tabular}
'We wring out the fish-poison roots, killing the fish.'

\subsection*{13.1.2 Causatives formed with (ké) leng 'give'}

Causatives formed with 'give' are not as common as are the causatives formed with 'do' which we have already examined, both in terms of the predicates that are found in this construction and in terms of sampled frequencies in texts and in conversation. For these reasons we can more easily define a set of semantic characteristics of the verbs that may appear with this causativising construction than for those that appear with li 'do'. One example has already been seen in (2), and further examples will be presented in the following sections.

Firstly, though, the verb 'give' which is used as a causative marker is not the entire verbal collocation that is used in translation equivalents of 'give' in English (or kasi in Papuan Malay). Recall from 5.4.4 and 7.8 that the predicate 'give' is formed with a complex 'get' + 'give' construction, ké leng, as in the following example, contrasted with the causative construction in (17).
(17) Te=Táng hòe-tè pe=wér-ung nì.

3PL=bird sago-3PL.GEN 3SG.F=get.F 3SG.F-give 1SG
'She gave me some rice.'
\begin{tabular}{lll} 
Te=Táng hòe-tè & pe=r-ung & \(n \grave{=}=k\)-ang. \\
3PL=bird sago-3PL.GEN & 3SG.F=3SG.F-give & 1SG=1SG-eat \\
'She fed me some rice.' & &
\end{tabular}

Note the ungrammaticality of using the simple verb leng 'give' in a main clause without ké 'get' (or one of the other verbs of getting), and conversely the ungrammaticality of using the complex 'get' + 'give' collocation in a causative construction.
(19) * te Táng hòe tè pe rung nì
(20) * te Táng hòe tè pe wé rung nì kang

That this use of leng has grammaticised to become a general causative marker, and not just a causative with predicates associated with the transfer of some property, can be deduced from the existence of sentences such as (21) (compare with (12) in the previous section).
\[
\begin{array}{lll}
\mathrm{Ne} \quad \text { te }=\text { r-ing=ko } & \text { ang } & \text { ne=ti-ti. }  \tag{21}\\
\text { 1PL 3PL=3PL-give.PL=oBV fish.poison } & \text { 1PL=1PL.do-RED } \\
\text { 'They made us wring out the fish-poison roots.' }
\end{array}
\]

\section*{xxyxxxyxyx}

Causatives formed with 'give' are not uncommon in languages of the world. In the next section we will take a short excursus to examine some prominent uses of 'give' as a causative marker in various languages.

\subsection*{13.1.2.1 'Give' as a causativiser in other languages}

Many languages form productive causatives from the verb that is also the translation equivalent of 'give'. This is commonly found in languages of Southeast Asia, and in Hokkien, an influential trade language in the region, as in the following examples.

Ambonese Malay
(22) De su=kas-bajalang beta-ng tete.

3SG PF=give-walk 1SG-GEN grandfather 'He sent my grandfather away.' (compare with Betang tete su bajalang'My grandfather has gone.')
(23) De su=kas kado sama tete.

3SG PF=give present PREP grandfather
'He gave a present to grandfather.'
Hokkien
\begin{tabular}{lllll} 
Wa & ho & i & zi & png. \\
1SG & CAUS & 3SG & cook & rice
\end{tabular}
'I made him cook rice' (compare with Wa zi png ho i 'I cooked rice for him.')
\begin{tabular}{llll} 
Wa & ho & i & png. \\
1 SG & CAUS & 3 SG & rice
\end{tabular}
'I gave him (some) rice'
This common typological pattern is also found in languages of New Guinea, such as Alamblak (Bruce 1984: xx) and Papuan Malay (Donohue to appear).

Alamblak
(26) Hınu-t doh-t hay-ni-më-t-t.
high.water-3SG.F canoe-3SG.F CAUS-go-R.PST-3SG.F-3SG.F 'The high water took (away) my canoe.' (compare with ni 'go.')
(27) Na yën-r hëhrampan hay-më-an-r 1SG child-3SG.M medicine give-R.PST-1SG-3SG.M 'I gave a child medicine.'

Papuan Malay
```

De=su=kas=tidor sa=pu=ana.
3SG=PERF=CAUS=sleep 1SG=POSS=child
'She's already put my child to sleep.'
(compare with Sa pu ana su tidor 'My child has gone to sleep.')

```
\begin{tabular}{|c|c|c|c|}
\hline De=su=kas & kladi & sama & de=pu=ana. \\
\hline \(3 \mathrm{SG}=\mathrm{PERF}=\) give & taro & DAT & \(3 \mathrm{SG}=\mathrm{POSS}=\) child \\
\hline & & & \\
\hline
\end{tabular} 'She's given taro to her child.'

Clearly the use of 'give' as a means of increasing the valency of a clause, and so marking it as expressing causation (arguably the least marked form of valency increase), is quite widespread. With this quick survey in mind, we can return to the use of leng in Skou as a causativiser.

\subsection*{13.1.2.2 The analysis of 'give' as a causativiser in Skou}

While there is an analogy to this use of 'give' (by which I refer to the Skou verb leng) as a causative verb in Skou, the analysis of the verb in sentences like this is complicated. Although glossed as, and used as the translation equivalent of 'give', this verb does not normally occur on its own with three arguments (see 5.4.4). This can be seen in sentence (30), which is not acceptable, even though all the arguments appear in the correct positions.
\[
\begin{array}{lll}
* & \text { móe } & \text { nì=leng }  \tag{30}\\
\text { fish } & 1 \mathrm{SG}=\text { give } \\
\text { GI }
\end{array}
\]
'I gave you a fish.'
Rather, a serial construction is used, with ké 'get' (or the appropriate feminine or plural form of the verb, wé or lóe), introducing the theme argument, and leng adding a recipient argument, as can be seen in (31). Note that ké 'get' can be used without leng, although it does not then have the transferral sense that is found with the combination ké leng, and it can only take two arguments, as in (32).
\begin{tabular}{llll} 
Móe & nì \(=\) ké & leng & mè. \\
fish & \(1 S G=\) get & give & \(2 S G\)
\end{tabular} 'I gave you a fish.'
\[
\begin{align*}
& \text { Táng nì=ké. }  \tag{32}\\
& \text { bird 1SG=get } \\
& \text { 'I got (caught) a bird.' }
\end{align*}
\]

These data imply that ké leng is a complex predicate made up of two verbs, and that ké and leng should be analysed as having the following subcategorisation frames:
```

ké: 'get < agent >, < theme >'
leng: ' "give" < agent>, < OBL: recipient >'

```

That is, the verb leng subcategorises for a subject and an obliquely-coded (that is, positionally postverbal) argument, while ké subcategorises for two preverbal arguments. There is no position in the subcategorisation frame for leng for the item transferred, the theme, in the construction. Together, these predicates combine to yield a three-place predicate with both theme and recipient:
(35) 'give to: \(\langle\) ké: get \(\langle\) agent, theme \(\rangle \quad\) leng: "give" \(\langle\) agent \(\rangle,\langle\) recipient \(\rangle\rangle\) '

From this discussion we can identify two important differences in the verb leng in Skou and translations of 'give' in other languages, differences that are relevant to the grammaticalisation of the verb to a function as a causativiser:
- leng in Skou is a verb that subcategorises for two arguments, not three;
- leng in Skou does not serve the predicative function of 'give' on its own, but must appear with a version of ké 'get' for completeness, in order to code the theme.
In many cases the only way to express causation is with an entirely different construction. One very productive version of this strategy involves an adjunct nominal construction with an alternation between an monovalent variant with the light verb li 'do', and a bivalent variant with a base-bivalent verb, such as ká 'hit, affect'.

Monovalent
(36) Nì ráue nì=li.

1SG laughter 1SG=do
'I laughed.'
(Another possible way to encode this meaning is Ráuenì=há 'I stand (at) laughter.' / 'I laugh.')

Bivalent
\begin{tabular}{llll} 
Nì & ke & ráue & nì=ká. \\
1SG & 3SG.NF & laughter & 1SG=hit \\
'I laughed at him.' &
\end{tabular}
* nì ke ráue nì li
(39) * nì ráue nì ká

XXXXX

\subsection*{13.1.3 Causatives with lóeng 'say'}

In some cases lóeng, which serves as a complement-taking verb meaning 'say, order, tell, command', appears in a causative complement construction. Only indirect causative can be expressed in this manner.

XXXXXXXXXXXXXX
(99) Ái lóeng=ko ke=toe, father say=OBV 3SG.NF=3.come 'God arranged for him to come, ...'
ke=a=toe=pa,
3SG. \(\mathrm{NF}=\mathrm{FOC}=3 . \mathrm{come}=\mathrm{INSTR}\)
'and he came, and then ...'
This type of only loosely grammaticalised causative is common in languages of New Guinea, and it is in fact contentious as to whether this is a causative construction or simply a complement formed with the main verb lóeng 'say, command, tell'. The ungrammaticality of causatives formed with lóeng from appearing with nonsentient subjects (or, indeed, subjects not gifted with language) is evidence that there is only a limited degree of grammaticalisation involved with this predicate, at best.

\subsection*{13.1.4 Causatives via serial verb constructions}

By far the most frequently encountered means of expressing a causative event is via a serial verb construction. Where a semantically more explicit verb is available, it is very marked to use one of the generic causative marking strategies presented earlier in this chapter.
\[
\begin{array}{ll}
\text { Ke=balèng=ing a te=jí=ko } & \text { ke=wung. }  \tag{99}\\
\text { 3SG.NF=man=the 3PL=PL.hit=OBV } & \text { 3SG.NF=die } \\
\text { 'They killed the man.' } &
\end{array}
\]
\[
\begin{array}{ll}
\text { (99) } \# \text { Te=ti=ko } & \text { ke=balèng=ing a ke=wung. } \\
\text { 3PL=3PL.do=OBV } & \text { 3SG.NF=man=the 3SG.NF=die } \\
\text { 'They killed the man.' }
\end{array}
\]

\section*{XxXxXXXXXXXXXXXXX}

\subsection*{13.2 Applicatives}

The applicative construction in Skou is restricted to appearing with monovalent verbs, with which it is used to indicate that a goal is being treated as the object of the clause. The applicative construction is signalled by the suffixal morpheme -na, which appears on the verb. \({ }^{57}\) Simple examples of sentences with and without the applicative are shown in (99) and (99).
```

Nì=ha TeJáwung.
1SG=walk Nyao

```
    'I walked from Nyao.' / 'I walked (around) in and about Nyao.'
(99) Nì=ha-na TeJáwung.
    1SG=walk-APPL Nyao
    'I walked to Nyao.'
    * 'I walked around in and about Nyao.'

The following ungrammatical sentences show attempts to build an applicative construction based on a bivalent verb (or trivalent predicate) which subcategorises for a goal. Although this goal is coded postverbally, in the position where obliques (other than locations) are found, it is functionally an object. Both of the following sentences are grammatical if the applicative morpheme is omitted, as seen in (99) and (99), but as they stand with the applicative morpheme in (99) and (99) they are ungrammatical.
```

* pe taíngbe=inga pe=w-é r-ung-na
3SG.F money=the 3SG.F=3SG.F-get 3SG.F-give-APPL
yu-pe-pè=pe
brother-3SG.F.DAT-3SG.F.GEN=3SG.F.DAT
'She gave the money to her brother.'

```
(99) Pe taíngbe=inga pe=w-é r-ung
    3SG.F money=the 3SG.F=3SG.F-get 3SG.F-give
        yu-pe-pè=pe.
        brother-3SG.F.DAT-3SG.F.GEN=3SG.F.DAT
        'She gave the money to her brother.'
```

* pe=fí-na
ke
3SG.F=meet-APPL 3SG.NF

```
    'She bumped into him.'
\(\mathrm{Pe}=f i ́\) ke.

3SG.F=meet 3SG.NF
'She bumped into him.'

\footnotetext{
57 This morpheme shows cognates in many languages of the are, such as Barupu (Macro-Skou) -na, possibly related to I'saka - na 1SG.DAT. It is also found in Sissano (Austronesian, Oceanic) - na. Interestingly, none of the more closely related Skou family languages (from figure 1 , section 1.4) show any reflexes of this morpheme, and it is hard to find outside the Piore river branch of the family.
}

These are verbs with a subject and an object, but which exceptionally encode the object postverbally, after the manner of obliques, and it is the fact that the postverbal argument is an object that prohibits it from appearing in an applicative construction. Animate, and even human obliques may participate in applicative constructions, as can be seen in (99) and (99).
\[
\begin{equation*}
\text { Nì=ha-na } \quad \text { te. } \tag{99}
\end{equation*}
\]

1SG=walk-APPL 3PL
'I walked up to them.'
\[
\begin{array}{ll}
\mathrm{Pe}=\mathrm{w}-\mathrm{a} \text { tà-na } & \text { ánì-pè=pe. } \\
\text { 3SG.F=3SG. } \mathrm{F}=\text { walk running-APPL } & \text { mother-3SG.F.GEN=3SG.F.DAT } \\
\text { 'She ran to her mother.' } &
\end{array}
\]

Note also the following sentence, which also has ha 'walk' as the main verb, and allows a goal without the use of an applicative. The goal is in this case licensed through the use of a structure involving a serial verb; in the sentence below the verb 'go' is what allows the goal to be mentioned, since the verb ha on its own only allows a location or source as oblique arguments. (The verb in this sentence appears in the 'unmarked' third person form, but the 1SG is also possible: Nì ha re Te J áwung.)
\begin{tabular}{lll} 
Nì=ha & te & TeJáwung. \\
1SG=walk & 3SG.F.go & Nyao \\
'I walked up to them.'
\end{tabular}

Rather than appearing with general motion verbs, the applicative suffix is more commonly found with an explicit manner-of-motion verb, such as ha tà 'run', as in (99).
\[
\begin{array}{ll}
\mathrm{Ni}=\text { ha tà-na } & \text { báng. }  \tag{99}\\
\text { 1SG=walk running-APPL beach } \\
\text { 'I ran to the beach.' }
\end{array}
\]
(99) \#/? Nì=re-na báng.
\(1 \mathrm{SG}=\) go-APPL beach
'I went to the beach.'
In cases such as these the paradigmatic contrast with a non-applicative structure is less clear, since the manner of motion verbs (apart from ha 'walk') do not allow for a goal oblique, but require serialisation with a separate motion verb to code this element. Sentences illustrating the ungrammaticality of a manner-of-motion verb appearing with an oblique goal, and the serialisation strategy, are shown in the next pair of sentences, to be compared with (99), which shows an applicative attached to the verbal element.
\(\mathrm{Nì}=\) ha tà báng.
\(1 \mathrm{SG}=\) walk running beach
* 'I ran to the beach.'
(grammatical with the reading 'I ran about on the beach.' - see below for a discussion of the significance of this grammatical reading, and the ways in which they are syntactically differentiated.)
\begin{tabular}{lll} 
Nì=ha tà & te & báng. \\
1SG=walk running, & 3SG.F.go & beach \\
'I ran to the beach.' & &
\end{tabular}

Here the contrast is between a verb + serial motion verb and a bare verb, rather than being between a bare verb and an applicative-suffixed verb; functionally, the serial verb construction allows the same options that the applicative does, the overt mention of the goal in the clause.

There is a contrast between the verb + serial motion verb and the verb + applicative suffix, as we shall see later, even though superficially they present the same morphosyntactic profile, a bare NP goal being permitted to appear following the verb(s) at the end of the clause. Certain grammatical tests, however, show that they are not identical.

Note that from the above sentences we can see that there is no requirement for the verb+applicative to appear with a direction of motion verb; we might expect there to be, on the basis of sentences with no applicative, in which the manner of motion verb must appear with a directional verb if a goal is to be encoded. This is not required in a clause with an applicative, though it is still possible, as seen in the examples below. 58
\begin{tabular}{lll}
\(\mathrm{Nì}=\) ha tà -na & 0 & báng. \\
1SG=walk running-APPL & seawards & beach
\end{tabular} 'I ran to the beach.'
(99) Nì=ha tà-na 0 re báng. \(1 \mathrm{SG}=\) walk running-APPL seawards go beach 'I ran to the beach.'

A positional variation of this is allowed only for applicative verbs, and not for nonapplicative verbs, and that involves the placement of the motion verb. In the non-applied verb the sequence must be manner verb - motion verb - goal, as seen in (99), and (99) below, but with the applicative it is possible for the motion verb to appear following the goal as well, as in (99). This is not possible for a non-applied verb, as is shown by the ungrammaticality of (99).
\begin{tabular}{ll} 
Ná \(\quad\) ǹ̀=hú=na & Pa ílong re. \\
paddle 1SG=paddle=APPL & Tami river go \\
'I paddled to the Tami river.' &
\end{tabular}
(99) * ná nì hú Paílong re

Similarly, the requirement that manner of motion verbs must appear with an orientation verb ('come', 'go' or a directional verb) is also relaxed when there is an obvious orientation implicit in the applicative.
\(\mathrm{Ni}=\) ha tà-na báng i li.
1SG=walk.running-APPL beach be do
'I'm running to the beach.'

The applicative can only be used to code a goal oblique. In (99) and (99) we saw that the inherent source associated with ha 'walk' is replaced by a goal object when the verb is suffixed with the applicative. Similarly, when the oblique argument is a location and not a goal, the applicative cannot be used. This can be seen in sentences in which the oblique appears following an auxiliary complex with 'be' and 'do', encoding a continuous tense/aspect xxx, which position can only be used to code locations, and not goals. In this case the applicative may not appear.

\footnotetext{
58 Similar constraints on the appearance of serial verb constructions with verbs that take the instrumental applicative marker are reported for Meyah (Gravelle 2001).
}
\(\mathrm{Nì}=\) ha tà
1SG=walk.running be do beach
'I'm running around on the beach.'
(99) * nì ha tà na i li báng.

The examples xxxxxx
We have established that there is a distinct applicative construction, and examined in broad detail the kinds of verbs with which it is found. The following section shall describe the status of the goal in the applicative construction, which might be thought to be somewhat ambiguous, given that the position of the goal in the clause does not change, remaining in postverbal position regardless of whether the verb is marked with an applicative morpheme or not.

\subsection*{13.2.1 The status of the goal in applicative constructions}

Since the typical position for objects of bivalent verbs is preverbal, and the typical position for oblique arguments is postverbal, there is usually an easily verifiable distinction between the two different grammatical functions based on their position with respect to the verb. In the case of goals, however, we find that they are postverbal when there is no applicative morpheme on the verb, typical for an oblique participant, and are also postverbal when the verb is found with an applicative morpheme. Clearly, if these goals in applicative constructions are Ps, they are atypical Ps. Since some Ps of bivalent verbs are lexically marked to that they appear in postverbal position, we must allow for the possibility that they are, in fact, the P of a bivalent clause, and so here we shall address the question of the status of the goal in applicative constructions.

We can show that, while the goal of a simple direction verb is an oblique, and not a P, the goal of a verb marked with the applicative is a P. In short, the ability of the goal in a subordinate clause to appear as the object of the main clause in (99)', in which the goal appears as the applicative object of the verb ha tà na 'run to', matches the behaviour of recipient objects such as the recipient of ké leng 'give'. Although they are coded postverbally, they behave as do preverbal objects for raising purposes. In contrast, there is no possible object-of-main-clause coding option available for the goal of the non-applicativised verb in (99), which is unambigously oblique by virtue of being the oblique complement of the verb re 'go'.


Similarly, the recipient 'goal' of a giving predicate, while postverbal, may appear as the object of a matrix clause, showing that it , too, is a postverbal P , and not a postverbal oblique.

Subject of lower clause appears as object of matrix clause
\begin{tabular}{llllll} 
Pe & nì=fu & rópu & pe=w-é & r-ung & ke. \\
3SG.NF & 1SG=see.F & book & 3SG.F=3SG.F-get & 3SG.F-give & 3SG.NF
\end{tabular}
'I saw her giving him the book.'
Recipient object of lower clause appears as object of matrix clause
(99) Ke
nì=fue rópu pe=w-é
\(r\)-ung.
3SG.NF 1SG=see book 3SG.F=3SG.F-get 3SG.F-give
'I saw him, her giving a book (to).'
Theme object of lower clause appears as object of matrix clause
\begin{tabular}{lllll} 
Rópu & ǹ̀=fue & pe=w-é & \(r\)-ung & ke. \\
3SG.NF & 1SG=see & 3SG.F=3SG.F-get & 3SG.F-give & 3SG.NF
\end{tabular}
'I saw her giving the book to him.'

\section*{XXXXXXXXXX}

More details on the raising construction shown here, and the restrictions on which nominals may participate in the sort of raising seen in (99)' and (99)', can be found in 3.11, where complementation and raisings involved in these constructions are dealt with in more depth.

\subsection*{13.3 The passive}

It is a general feature of the non-Austronesian languages of Melanesia that they lack voice alternations, either passives or antipassives (Foley 2000). This would at first glance also appear to be true of Skou, but unusually for the New Guinea region Skou has a verb, wí, clearly related to, but distinct from, wé 'get (feminine object)', which functions in many ways like a non-specific passive. Compare the following two sentences:
obj Pred:V
1SG 3SG.NF=hit
'He hit me.'
(99)
SUBJ Pred: \([\mathrm{N}+\mathrm{V}]\)
(Nì) mòng nì-wí.
1SG wound 1 1SG-get
'I got hit.'

Just as in English, it is possible to mention the by-phrase agent of in the 'passive' clause, and in this case the agent is coded as an oblique argument of the verb, appearing in postverbal position. The following sentence shows that it is possible to overtly code the agentive by-phrase in the 'passive' version of the clause seen in (99).
\begin{tabular}{lll} 
SUBJ & PRED: \([\mathrm{N}+\mathrm{V}]\) & OBL:agentive by-phrase \\
(Ni) mòng nì-wí & ke. \\
1SG wound 1 1SG-get & 3SG.NF \\
'I got a wound from him.' &
\end{tabular}

Peripherally we may not that an alternative interpretation for the postverbal position is as the affected location in an external possession construction, as in the following example:
(99) Mòng nì=wí tánge.
wound 1SG-get leg
'I got hit in the leg.'
The interpretation of the postverbal nominal is not problematic, given the animacy and agentivity levels of body parts. Note, most interestingly, that the subject of this 'passive' construction is the possessor, not the possessum. In fact, we find that the 'passive' cannot appear with tánge as the subject:
\[
\begin{array}{cll}
\text { (99) * tánge mòng } & \begin{array}{l}
(\mathrm{ke}=) \mathrm{wí} . \\
\text { leg }
\end{array} & \text { wound } \\
(3 \mathrm{SG} . \mathrm{NF}=) \text { get }
\end{array}
\]

This implies that, as is typical for many languages of, say, South-east and East Asia, and is also true of Papuan Malay, the 'passive' is more than simply a device predicated on discourse and syntactic moivation, but also contains a significant amount of semantic restructuring as well. Specifically, there is a strong sense of adverse affect built into the semantics of such a predicate, and this in turn stipulates that the subject in the passive predicate must be animate.

\subsection*{13.3.1 The status of mòng wí as a 'passive' construction}

I have been using scare quotes around the word 'passive' when describing this construction. There are several issues salient in the analysis of the mòng wí constructions, and the ones that I shall address here, possibly the more salient, are the following:
- in what sense does the mòng wí construction 'correspond' to the active ká 'hit' predicate? Is the correspondence the same as is found in other languages with 'true passives'?
- how productive does a syntactic process have to be to be called a 'construction' are we justified in discussing a 'passive construction', or are we dealing with a lexically unusual verb?
- in what sense is the patient in a mòng wí construction the syntactic subject? Could it not be thought of as an object, which exceptionally shows proclitic agreement on the verb?
We shall address the last of these points first, simply because it is the one most subject to empirical testing, and then examine the other two issues.

\subsection*{13.3.2 Patient as subject, agent as oblique}

We can offer evidence for the idea that the patient in these constructions is the subject. \({ }^{59}\) We can apply tests for subjecthood, which indicate that the patient is indeed a subject, and that the agent is oblique. The tests that we can refer to involve:

\footnotetext{
59 It would be more 'general' to discuss the grammatical status of the syntactic roles A and P, rather than the semantic roles agent and patient. Since, in the case of Skou, there is only one passive alternation, we are justified in being explicit without needing to fear losing generality.
}
- the restriction of floated quantifiers;
- behaviour in negative sentences;
- behaviour in switch-reference marked clause chains.

The results obtained from examining these different constructions shall be presented one by one in the following sections.

\subsection*{13.3.2.1 Floated quantifiers and mòng wí}

Floated quantifiers are restricted to the P of a bivalent clause, or the single core argument, the S , of a monovalent one (see 16.3 for discussion). In a construction with mòng wî as the predicate, a floated quantifier can only be restricted to the theme, not the (implied or overt) agent, nor the adjunct nominal mòng. This suggests that mòng is simply part of the complex predicate, and cannot be considered an argument of the verb (in this respect it behaves somewhat different to at least some other adjunct nominal + verb constructions - see chapter 14).
```

Mòng te=r-í fátà.
affect 3PL=3PL-get.PL all

```
'They all got hit.'
* 'They got hit a lot.' (*‘They got a lot of hitting/affect.')

Compare this sentence and the interpretation of the floated quantifier with the following active sentence, using the plural form of the verb ká 'hit'.
\[
\begin{array}{lll}
\text { Te=ing a } & \text { te } & \text { ke=jí }  \tag{99}\\
\text { 3PL=the } & \text { 3PL } & \text { fátà. } \\
\text { 3SG.NF=hit.PL } & \text { all }
\end{array}
\]
'They hit them all.'
* 'They all hit them.'

\section*{XXXXXXXXXX}

The verb in the predicate here shows the same alternation in terms of suppletion as is found with the verb wé 'get (feminine object)', adding further weight to the idea that the two verb roots are related. In the mòng wí 'be hit' construction, however, the variation in form of the verb is dependant on the number of the subject. Since number agreement (in terms of vowel alternations of suppletive forms) on the verb depends on the features of either the \(S\) or the P , this means that, if in examples such as (99) the use of a form of lóe 'get.PL' depends on the number of the participant being hit, and cannot depend on the amount of hitting, then the hitting cannot be interpreted as a P. The use of subject clitics on the verb agreeing with the hit participant shows that this argument cannot be a P either, and so must be interpreted as the S in the clause.

This implies that the clause is monovalent, and implies that mòng must be interpreted as an adjunct nominal (though the choice of the verb lóe that indicates a plural object implies that, if it is an adjunct nominal, then it is an adjunct nominal that is an argument of the verb, and not simply part of the predicate). It also means that the construction must in fact be a true passive, since it involves reducing the valency of the clause as a whole.

Note that it is not possible to interpret fátà as modifying mòng, even when that is the only plausible nominal in the clause. Compare the grammatical (99) above with the following ungrammatical sentence, in which the subject is singular, and so the quantification is not allowed:

> * mòng nì=wé fátà.
> affect 3PL=get.F all
> 'I got hit a lot.'
```

    * mòng nì=lóe fátà.
    affect 3PL=get.PL all
    'I got hit a lot.'
    ```

When we examine the behaviour of this construction in questions we find that the theme cannot be quite so unambiguously identified as the subject. The following is an acceptable question:
(99) Bá mòng pe=wí? who affect 3SG.F=get 'Who was hit?'

An alternative that is found in other questions about the identity of the subject, using interrogative clitics on the verb instead of the regular third person pronominal clitics, is not acceptable, as can be seen in (99).
```

* Mòng bá=wí?
affect who=get
'Who was hit?'

```

\section*{This implies that there is a xxxxx}

Given these facts about the construction involving mòng wí, we must ask whether we are justified in calling it a 'passive', or if it is simply a verb that, like nonagentive verbs or inverted predicates (see 5.4.1.2 and 5.4.3.4), codes an affected subject. The difference, of course, is that this is a predicate with a specified (albeit optional) oblique agent as well as the affected subject. This means that this is a monovalent clause, with a single S , and should not be thought of as having an 'inverted' predicate (see 5.4.3.4), in which the more animate, topical argument is coded as P and the inanimate cause is the A .

\subsection*{13.3.2.2 Negation and mòng wí}

The negation of a clause with a nominal that appears in a postverbal position, and is nominally oblique, such as locations or goals, results in the 'oblique' argument appearing preverbally, with the syntactic properties of an object (see 3.11). Subjects and objects do not show this sort of behaviour.

If the agent in a mòng wí construction shows similar behaviour, we can assume, in the absence of any counter-evidence, that the agent is grammatically oblique. With this in mind, compare (99), repeated here as (99), with its negative equivalent, (99). Note also the ungrammatical sentence in (99), in which ke appears between mòng and the verb.


The fact that ke appears postverbally in (99), the position typically associated with adjuncts and obliques, suggests that in (99) it is coded as a non-core argument: either an adjunct or an oblique. Furthermore, the fact that ke cannot appear between mòng and wí is evidence that mòng is not an object in the clause. When, as a result of negating a clause with both an object and an oblique, a clause with two objects is produced, the order of those objects is not fixed with respect to each other. This can be seen in (99) and (99), which negative equivalents of (99) (see also the discussion in chapter 16).
\[
\begin{equation*}
\text { Naké ke=ká } \ldots \text { líhi. } \tag{99}
\end{equation*}
\]
dog 3SG.NF=hit garden
'He hit the dog in the garden.'
(99) Líhi naké ke=ká ka. garden dog 3SG.NF=hit NEG 'He didn't hit the dog in the garden.'
(99) Naké líhi ke ká ka. 'He didn't hit the dog in the garden.'

It should be mentioned that a more 'neutral' negation of (99) would be that seen in (99), in which the location is simply not mentioned. Having any mention of an oblique in a negated clause implies some degree of contrastive or pragmatic focus on that constituent.
(99) Naké ke=ká ka. dog 3SG.NF=hit NEG
'He didn't hit the dog.'
By comparison a location in a negated clause headed by a complex \(\mathrm{N}+\mathrm{V}\) predicate cannot appear between the N and the V , as shown in the following sentences.
(99) Naké nì kóeng ke=ká líhi. dog 1SG tooth 3SG.NF=hit garden 'The dog bit me in the garden.'
(99) Naké líhi nì kóeng ke=ká ka. dog garden 1 SG tooth 3SG.NF=hit NEG 'The dog didn't bite me in the garden.'
(99) Naké nì líhi kóeng ke ká ka. 'He didn't hit the dog in the garden.'
(99) * naké nì kóeng líhi ke ká ka
'He didn't hit the dog in the garden.'
The fact that ke cannot intrude between mòng and wí in (99) shows that mòng does not display the positional properties of objects. It appears, then, that the agent in one of these constructions is truly an oblique nominal, and that mong is truly part of the predicate, as the first part of an \(\mathrm{N}+\mathrm{V}\) construction, and is not the object in a bivalent clause.

\subsection*{13.3.2.3 Switch reference and mòng wí}

One test for subjecthood in Skou involves the behaviour of the nominals in a sentence with switch refererence morphology. If we examine such a sentence, seen here in (99), we can see that the clause marked with \(=\mathrm{pa}\), the morpheme used in same-subject conjunction, is used to monitor the identity of the affected argument of the first clause with the \(S\) argument in the
second clause. This shows that the proclitic agreement on the verb does indeed index the subject of the clause, since this same argument is selected as the pivot in switch reference structures.
(99) Hans mòng ke=wí Theo=pa, ke=moe ti pá. Hans wound 3SG.NF=get Theo=INSTR 3SG.NF=return 3SG.NF.go house 'Hans \({ }_{i}\) got hit by \(\mathrm{Theo}_{\mathrm{j}}\), and \(\emptyset_{\mathrm{i} / *} / \mathrm{j}_{\mathrm{j}}\) went back home.'

If we wish to conjoin the agent of the first clause with the agent of the second clause, we must use the obviative marker \(=k 0\) that is used to conjoin two clauses that do not share the same subject, as can be seen in (99).
(99) Hans mòng \(k e=w i ́\) Theo=ko, ke=moe ti pá.

Hans wound 3SG.NF=get Theo=OBV 3SG.NF=return 3SG.NF.go house 'Hans \(\mathrm{s}_{\mathrm{i}}\) got hit by \(\mathrm{Theo}_{\mathrm{j}}\), and then Theo \(\mathrm{j}_{\mathrm{j}} /{ }_{\mathrm{i}}\) went back home.' OR 'Theo \({ }_{j}\) hit Hans \({ }_{i}\), and then \(\emptyset_{j} / *_{i}\) went back home.'

Chapter 19 presents a more detailed discussion of the forms and functions of the switch reference system in Skou, showing that same versus different 'subject' is not always the category that is monitored by this morphology, which means that this test is not entirely unequivocal.

\subsection*{13.3.3 On productivity and grammatical constructions}

The issues raised by the putative passive construction in Skou are quite intriguing. It is not unknown for a language to 'buck the trend', and display features that are not typical of its region or its genetic group, such as the appearance of a passive in Skou. While it is true that Papuan languages tend to lack voice systems, there are occasional exceptions to this. Tanglapui shows a restricted inverse systems, being contrastive only with high-transitive verbs (Donohue 1996). Saweru operates with a voice systems that is monitored by variation in the amount of inflection on the verb, apparently acquired through contact with neighbouring Austronesian languages, which possess similar typologies. It is most likely that there are other examples of non-canonical voice systems in evidence in other, less well-described Papuan languages.

The issue that we must confront with the Skou passive, however, is of a different kind: how productive must an alternation be to 'count' as being productive, and so a regular part of the grammar?

Ideally, of course, a paradigm is fully productive for an entire lexical class; in the case of a voice system, the 'ideal' voice system would productively operate over the entire lexical set of verbs. Yet even in languages with clear voice alternations there are lexical exceptions: English, for instance, allows I resembled her, with the subject being the A, but not *She was resembled by me, with the reverse coding. Similarly, but showing the opposite preference, Tagalog allows tinakot 'fear' in main clauses, with a P subject but not tumakot, the 'actor voice' equivalent with an A subject. \({ }^{60}\) Tukang Besi (Donohue 1998) allows molinga'e 'forget' with the P as subject, but not molinga with A as subject. It is clear that some level of exceptionality is tolerated in the grammarians' notion of a voice system. It seems, however, that a 'productive' voice system must allow at least the primary transitive verbs to participate in the alternation. We are not

\footnotetext{
60 A small number of verbs in English only appear in clauses with passive morphology: reincarnate, repute, rumour, for example. Others are only rarely found in active clauses; see Dingare (2001) for further details.
}
surprised at the English system which allows the alternation in high transitive bivalent verbs, yielding the pair hit: be hit, but not with low-transitive verbs, and so we lack pairs such as resemble: *be resembled.

Now in Skou we have a situation in which the putative voice system can be described for exactly one predicate, the translation equivalent of 'hit'. I suggest that it is no accident that this is the one verb to display a voice alternation, since this is the most highly transitive verb in the language. We can make this claim not only one cross-linguistic grounds based on the semantic content of the verb, but also on language-internal morphosyntactic grounds: 'hit' is a predicate that shows not only subject agreement but also object marking, through suppletive verb forms (jí for plural object, láng for feminine object, ká otherwise), and which does not (unlike some predicates - see 5.4.3.3) allow for a postverbal alternative coding option for the P. All these factors, plus the semantic representation of the verb, allow us to consider it a primary transitive verb - a perfect exemplar of the kind of verb that should participate in a voice alternation, if any verbs in the language do. Far from being exceptional, the restricted nature of the voice alternation in Skou is simply an example of a language at one extreme end (the lower end) of a continuum that can be observed in the productivity of voice systems in other languages.

\subsection*{13.3.4 Linking between separate lexical items as paradigmatic?}

The main question in an analysis of the mòng wí construction as a possible passive involves the question of the nature of the putative correspondence between the active predicate ká 'hit' and the 'passive' predicate mòng wí 'be hit'. Unlike active:passive pairs in languages with unproblematic voice alternations, such as English with its analytical passives (hit, be hit) or Indonesian with a purely morphological voice system (mem-pukul 'hit', di-pukul 'be hit'), there is no shared lexical material in the Skou pair. The verb roots are not obviously related to each other in any phonological way, synchronically or historically, nor do I wish to argue that there is some 'underlying level' at which they are similar. These two predicates are clearly two separate lexemes; the mong wí is, if it is best analysed as a passive, a lexical passive, not a morphological or analytical one. How, then, can we analyse two lexemes as representing an active:passive paradigm? Is this not akin to analysing 'receive' in English as the 'passive' equivalent of 'give'?

There are grounds for considering the passive analysis to be the correct one. Firstly, speakers recognise this as a correspondence, in a way that they do not recognise a link between, for instance, kasi 'give' and dapa(t) 'receive' in Papuan Malay, or pukol 'hit' and kena 'suffer' (also in Papuan Malay), or for that matter between héng 'ask' and lóeng 'say, answer' in Skou. Skou people do, however, feel similarly about the relationship between ké yata li 'sell' and yata li ké 'buy', which are opposite descriptive predicates, which make use of the same lexical items. This implies that we should ascribe some difference to the lexical representation of ká with respect to mòng wí, compared to the same speaker's behaviour with the other pairs.

In English we recognise the connection between conative pairs such as hit, hit at, and between simple verbs and phrasal verbs, in examples such as open, open up. With less semantically specified verbs, such as get, there is not always either a strong phonological connection, nor an obvious semantic connection, between two possible predicates: compare get into, [gemitu] 'come to like a lot', with get around [geterawnd] 'manage to avoid prescribed activity or restriction'. Here the predicates are quite disparate, yet they are felt to be somehow
linked together, more tightly than they are to semantically closer matches: get around is not thought of as particularly 'close' to avoid, nor is get into especially related lexically to appreciate, even though these are predicates that share many more semantic features in common than the two get-predicates do with each other.

Yet with the pair ká 'hit' and mòng wí 'be hit' there is a very close semantic relationship. We cannot use mòng wí as an alternative coding device for any predicate other than ká 'hit'; constructions such as those attempted in (99), with a completely non-affective verb, are ludicrous from a Skou perspective.


Clearly the predicate mòng wí does, in some sense 'belong' with ká, regardless of the fact that they do not share any phonological material, just as láng 'hit (feminine)' and jí 'hit (plural)' are related to ká 'hit'. We can talk about connections between lexical entries in the absence of those lexical entries being subentries of each other, and that is the relationship between the simplex predicate ká 'hit' (with all its variants, depending on features of the object), and mòng wí 'be hit' (again, with variation, depending on the number of the subject).

\subsection*{13.3.5 mòng wí as a passive construction}

Can we consider the pair ká 'hit' and mòng wí 'be hit' to represent the same sort of opposition that is found between the translations given for them in English, namely that of an active:passive pair? To claim that this is so is to afford this construction the status of one member of a voice alternation. But is it valid to describe an alternation as a voice alternation when it only applies to one pair of predicates?

This kind of phenomenon, in which it appears that a lexical item displays the argumentstructure characteristics of a passive (rather than being a productive morpheme) has been termed a lexical passive (in contrast to a morphological or analytical one). Payne (1997: 205) notes that lexical passives are rare; the appearance of a single lexical passive predicate in Skou, with correspondences only to one other very in the lexicon is, then, not too surprising; more surprising would be the discovery of a language in which every 'normal' active verb had a lexical passive counterpart, with no morphologically or syntactically productive voice alternation mechanism. The active correspondant to mòng wí, ká 'hit', is in every sense the most prototypical of bivalent verbs, and if any verb should be eligible to have a lexical passive correspondant it would be ká. The unusualness lies then not in the correspondence between a single lexically active verb and its counterpart, but in Skou for having such a lexeme.

\subsection*{13.3.6 M orphosyntactic restrictions of the passive}

We have examined the basic, clause-internal, grammatical consequences of the passive for argument coding in the preceding sections. In this section some of the aspectual dimensions to the passive must be mentioned

In 7.9 we examined the four basic TAM distinctions that can be marked on most verbal predicates in Skou. With the passive, however, we find that both of the auxiliary-using coding
options, the continuous and the intentional, cannot appear. The irrealis and the completive/plain coding choices are open, as shown in the contrastive grammaticality of the following four sentences.
```

(99) Mòng ke=wí.
wound 3SG.NF=get
'He was hit.'
(99) Mòng $k e=w i ́-w i ́$.
wound 3SG.NF=get-RED
'He will be hit.'

| * mòng | ke=wí-wí | li. |
| :--- | :--- | :--- |
| wound | 3SG.NF=get-RED |  |
| 'He wants to be hit.' |  |  |

    'He wants to be hit.'
    (99) * mòng ke=wí i li.
wound 3SG.NF=get-RED be do
'He is being hit.'

```

The restriction of the passive to a particular type of verbs is absolute: there is, as mentioned in the previous discussion, only one passive alternation, and so there is only one verb that can be said to meet the criteria for appearing in a passive construction, the verb ká 'hit'. This means that there is a strong restriction on the semantic roles of the arguments in the passive, as well as a strong requirement for adverse affectedness on the part of the passive subject.

\subsection*{13.4 Reflexives}

There is no true reflexive construction in Skou, though there are various ways to express these concepts. For the most part simple bivalent sentences are used to represent what in English would be coded with a reflexive. Examine the following sentence:
(99) Nále lang nì=li=ko, nò-kangkang nì=na lu=ko
taro dish \(1 \mathrm{SG}=\mathrm{do}=\mathrm{OBV}\) hand-finger \(1 \mathrm{SG}=\) pound \(=\mathrm{OBV}\)
yáng e tue.
hurt 3SG.F.be 3SG.F.do
'I was pounding taro for a meal, and I hit my finger, and it hurt.'
Here the form of the second clause nòkangkang nì na lu is the same as it would be if the object was not related to the subject; so ná nì na lu 'I hit the taro.' shows the same structure. In other words, there is no special morphosyntactic marking for the reflexive.

In English and many other language a reflexive form is possible as an alternative to the mention of the body part that has been affected; in addition to 'I hit my finger.', we also have 'I hit myself'. In Skou this is not the case; at best, a more generic noun nòe 'body', still possessed, can be used, as in the following examples.
\[
\begin{align*}
& \text { Nòe-nì=ne nì= wò na lu. }  \tag{99}\\
& \begin{array}{l}
\text { body-1SG.GEN=1SG.DAT } \quad \text { 1SG=EMPH pound } \\
\text { 'I bashed myself.' }
\end{array}
\end{align*}
\]

\footnotetext{
Nòe-ké=ke ke=wò ká. body-3SG.NF.GEN=3SG.NF.DAT 3SG.NF=EMPH hit 'He hit himself.'
}

In these cases the subject clitic on the verb has the emphatic marker (see 4.7.4 for non-reflexive uses of this morpheme) attached to it, unlike the original sentence in (99). Without this morpheme, this sentence is at best marginally acceptable, though most speakers reject it outright.
(99) * nòe ké ke ke ká

Attempts to directly elicit reflexives result in the use of noe; this might indicate that, as in many other languages, nòe 'body' is grammaticalising into becoming a reflexive marking, stripped of the semantic reference that it has as a plain noun. The following sentences show how speakers avoid the use of the grammaticalised sense of nòe if there is another plausible noun that can be substituted in its stead, and treated as a 'true object'.
\begin{tabular}{llll} 
Nì=re & hángpeng, \(\quad\) tánghang-nì=ne & nì=fu & í. \\
1SG=go \(\quad\) bush & face-1SG. \(\mathrm{GEN}=1 \mathrm{SG} . \mathrm{DAT}\) & \(1 \mathrm{SG}=\) see. & pool \\
'I went to the bush, and saw my face in a pool of water.' & \\
(For Papuan Malay Sa pi hutan, lalu sa lia sa pu diri di kolam) &
\end{tabular}
\begin{tabular}{llll} 
Nì=re & hángpeng, & nòe-nì=ne & nì=fu \\
1SG=go & bush & body-1SG. & \\
'I wen=1 & SG.DAT \(1 S G=s e e . F ~\) & pool \\
(For Papuan bush, and saw myself in a pool of water.' & \\
(Fa pi hutan, lalu sa lia sa pu diri di kolam) &
\end{tabular}

We can see that while there is a variety of ways of expressing reflexivity in Skou, there is no common syntactic behaviour to logically unify them together. If there is such as thing as a 'reflexive construction' in Skou, then it exists as an abstract entity only, and does is not strongly grammaticised, if at all, in terms of dedicated morphology or dedicated syntactic constructions.

\subsection*{13.5 Reciprocals}

The reciprocal construction in Skou is a variant of the normal structure used to express conjoined nominals in the same NP. The verb is necessarily marked for a non-singular subject, but there is no explicit marker of reciprocity in the clause; only the absence of any realisation of any nominal (or pronominal) object in the clause is a clue to the fact that a normally bivalent verb should be read with a reciprocal meaning. (The fact that, in other circumstances, the overt presence of an object is obligatory, this is then a significant, if negative, indication of the construction.) An example is the following sentence, which is grammatical with the translation given, and not with the reading 'Those two hit (someone else).'

Tenake=ing a te=j-á.
3DU.NF=the 3PL=3PL-hit
'They hit each other.'
* 'Those two hit (someone else).'

With plural reciprocal subjects, as opposed to simply dual ones as exemplified above, the same construction is used:
\[
\begin{align*}
& \text { Te=ing a te=j-á. }  \tag{99}\\
& \text { 3PL=the 3PL=3PL-hit } \\
& \text { 'They hit each other.' } \\
& \text { * 'They hit (someone else).' }
\end{align*}
\]

Note that the clauses in (99) and (99) are not 'normal' variants of a bivalent clause. A predicate that subcategorises for two arguments MUST express them, either through agreement on the verb with pronominal status (see 7.3), or in overt NPs. Compare (99) with (99). In (99) we can see the use of the 'dummy' ya 'thing', which must appear if no lexical or pronominal object is present. Alternatively, a form of the verb that specifies the object may be used, as in (99).

> Te=ing a ya te=j-á.
\(3 \mathrm{PL}=\) the thing \(3 \mathrm{PL}=3 \mathrm{PL}-\mathrm{hit}\)
'They hit (something/ ?someone else).'
* 'They hit each other.'
(99)

> a. Pe=inga ya pe=fue. 3SG.F=the thing 3SG.F=see 'She saw (something).'
> b. \(\mathrm{Pe}=\) ing a (ya) pe=fu. 3SG.F=the thing 3SG.F=see.F 'She saw something (feminine).'

It is possible for the object position to be filled with a pronoun bearing the same pronominal features of the nonsingular subject; in this case the clause is ambiguous in reading between a reciprocal and a simple transitive clause.
\[
\begin{align*}
& \text { Te=ing a } \quad \text { te } \quad \text { te=j-á. }  \tag{99}\\
& \text { 3PL=the }
\end{align*}
\]
'They \({ }_{i}\) hit each other \(\mathrm{r}_{\mathrm{i}}\).'
OR 'They \({ }_{i}\) hit them. \({ }_{j}\).'
An alternative reciprocal construction is found only with predicates that take adjunct nominals. In this case the verb that is associated with the adjunct nominal is replaced by li 'do', and the subject and object of the non-reciprocal predicate are covertly coordinated inside the same NP. Proof that \(T e=T e ́ m e ~ a n d ~ T e=M a ́ w o ~ i n ~(99) ~ a r e ~ m e m b e r s ~ o f ~ a ~ s i n g l e ~ N P ~ c o m e s ~ f r o m ~\) the ungrammaticality of ergative case marking on, shown in (99).
\begin{tabular}{lllll} 
(99) & Te=Máwo & te & Te=Téme & pìng \\
3pL=Skou Mabo & te=r-ú. \\
3PL.ERG & 3PL=Nafri & bow & 3PL=3PL-release.PL
\end{tabular}
'The Skou Mabos shot the Nafris.'
(99)' [NP SUBJ] [NP OBJ ] [ADJ. NOM. ] Verb
(99) Te=Téme Te=M áwo pìng te=ti.

3pL=Nafri 3PL=Skou Mabo bow 3PL=3pL.do
'The Nafris and the Mabos shot each other.'

'The Nafris and the Mabos shot each other.'
We can see that, as with reflexives, there is no morphology dedicated to reciprocal constructions, but there is nevertheless a distinct reciprocal construction in the language. This
reciprocal construction displays behaviour, in terms of the morphology and syntax that may appear in it, that is not found elsewhere, and so it is uniquely defined.

\subsection*{13.6 Combinations of valency-changing processes?}

It is logically possible for aclause to contain more than one valency-changing process. We can see one example of this happening in the following (elicited) Skou sentence, in which a causativised predicate appears in a reciprocal clause.
\begin{tabular}{lll} 
Te te te=ti=ko & te=fe. \\
3PL 3PL 3PL=do.PL=OBV & 3PL=afraid.PL \\
'They scared each other.' &
\end{tabular}

That is, there are many languages in which both an applicative and a passive can be found applied to the same verb. The following examples from Tukang Besi show this happening.

Tukang Besi: plain clause
No-gonti te kau kene baliu.
3R-chop CORE wood with axe
'He chopped the wood with an axe.'
instrumental applicative
(99) No-gonti=ako te baliu te kau. 3R-chop=APPL CORE axe CORE wood 'He chopped the wood with an axe.'
instrumental applicative + passive
\[
\begin{align*}
& \text { No-to-gonti=ako=mo te kau na baliu. }  \tag{99}\\
& \text { 3R-PASS-chop=APPL=PF CORE wood NOM axe } \\
& \text { 'The axe was used to chop wood.' }
\end{align*}
\]

On the other hand some combinations of valency-changing processes are no so readily combinable. Continuing from Tukang Besi, we can see that while a passive may combine with a causative in the same clause, the reverse is not the case. This reflects strong (but not absolute) cross-lingusitic tendencies.

Tukang Besi: grammatical passive of causative
No-to-pa-gonti=mo na mia te kau.

3R-PASS-CAUS-chop=PF NOM person CORE wood
'The person was made to chop the wood.'
ungrammatical causative or passive
\[
\begin{align*}
& \text { * no-pa-to-gonti=mo na kau }  \tag{99}\\
& \text { 3R-CAUS-PASS-chop=PF NOM wood } \\
& \text { 'the wood was made to be chopped' }
\end{align*}
\]

In Skou this sort of free combining is less likely to be found, for various reasons. The passive is, as we have seen, lexically restricted, and furthermore is a lexical passive. In common with most languages, passives cannot be causativised. All the sentences in (99), showing attempts to causativise a passive predicate such as (99), are thus ungrammatical.

Basic passive predicate
(99)
\(\begin{array}{llll}\text { Ke=bà=ing a } & \text { mòng } & k e=w i ́ l & \text { pe=a. } \\ \text { 3SG.NF=person=the } & \text { wound } & \text { 3SG.NF=get } & \text { 3SG.F=FOC }\end{array}\)
'He was hit by her.'
Attempted causative of a passive with leng
(99)
\begin{tabular}{llll} 
* te=r-íng=ko & ke=bà=ing a & mòng & ke=wí. \\
3PL=3PL-give.PL=OBV & 3SG.NF=person=the & wound & 3SG.NF=get \\
* 'They caused him to be hit.'
\end{tabular}

Attempted causative of a passive with li: only an active interpretation possible
\begin{tabular}{lll} 
Te ke=bà=ing a & mòng & te=ti. \\
3PL 3SG.NF=person=the & wound & 3PL=3PL.do \\
'They wounded him.' & & \\
* 'They caused him to be hit.' &
\end{tabular}
\begin{tabular}{llll} 
* te \(\quad\) ke=bà=ing a \(\quad\) mòng & te=ti & pe=a. \\
3pL \(\quad\) 3SG.NF=person=the wound & 3PL=3PL.do & 3SG.F=FOC \\
* 'They caused him to be hit by her.' & &
\end{tabular}

We can summarise the grammatical and ungrammatical combinations in table 160xxx. Note that no construction may apply to another of the same kind; this is only really noteworthy for the banned causative of causative combination, as described in 13.6.1.

Table 160. Combinations of valency-changing processes
\begin{tabular}{lcccccc}
\hline \hline a \(\downarrow\) of a \(\rightarrow\) & Causative & & Applicative & Passive & Reflexive & Reciprocal \\
\hline Causative & no & yes & no & yes & yes \\
Applicative & no & no & no & no & no \\
Passive & no & no & no & no & no \\
Reflexive & yes & no & no & no & no \\
Reciprocal & no & yes & no \(^{\dagger}\) & no & no \\
\hline \hline
\end{tabular}

The following sections detail the grammatical and ungrammatical combinations that are shown in this table, offering some explanation for both the gaps and the attested combinations.

\subsection*{13.6.1 Causative + other valency-changing process}

Causatives show the greatest freedom in combinations with other valency-changing processes. An apparently biclausal combination with an applicative can be seen in (99).

Causative + applicative in a \(=k 0\)-linked clause
\[
\begin{array}{lll}
\text { Ke=li=ko te=angku=fue a te=y-a-na } & \text { báng. }  \tag{99}\\
\text { 3SG.NF=do=OBV } 3 \text { 3L=child=that 3PL=3PL-walk-APPL } & \text { beach } \\
\text { 'He made the children go to the beach.' } &
\end{array}
\]

Evidence that the relationship between the two clauses linked with the obviative =ko can be found in the fact that there are constraints on combinations. While the ungrammaticality of the combination of causative and passive in (99) is perhaps expected on cross-linguistic grounds, the inability of two causative 'clauses' to embed, seen in (99), is not so predictable, and is
something requiring a language-specific parametric setting ('do not form causatives of causatives or passives').

Ungrammatical: causative + passive
\[
\begin{array}{llll}
\text { * } \mathrm{ke}=\mathrm{li}=\mathrm{ko} & \text { pe } & \text { mòng } & \text { pe=wí }  \tag{99}\\
\text { 3SG. NF=do=OBV } & \text { 3SG.F } & \text { wound } & \text { 3SG.F=get }
\end{array}
\]
'He made her get hit.'
Ungrammatical: causative + causative
\begin{tabular}{|c|c|c|}
\hline * ke=li=ko & pe & pe=tue=ko \\
\hline \(3 \mathrm{SG} . \mathrm{NF}=\mathrm{do}=\mathrm{OBV}\) & 3SG.F & 3SG.F=3SG.F.do=OBV \\
\hline te=angku=ing a & hòe & te=t-ang \\
\hline \(3 \mathrm{PL}=\) child=the & sago & \(3 \mathrm{PL}=3 \mathrm{PL}-\mathrm{eat}\) \\
\hline 'He made her g & the c & dren to eat the sago.' \\
\hline
\end{tabular}

The following example in (99), from Tukang Besi, shows that not all languages share this ban.

Tukang Besi: causative + causative
(99) No-hepe-hoko-leama di iaku te wurai.

3R-REQ-FACT-good OBL 1SG CORE sarong
'He asked me to repair the sarong.'
Combinations with reciprocals and with reflexives are pragmatically unlikely, but syntactically possible, as seen in (99) and (99).

> causative + reciprocal
\[
\begin{align*}
& \text { Ke=li=ko te te } \quad \text { te }=j i ́ l  \tag{99}\\
& \text { 3SG. } \mathrm{NF}=\mathrm{do}=\mathrm{OBV} \text { 3PL 3PL } \quad \text { 3PL=hit.PL } \\
& \text { 'He made them hit each other.' }
\end{align*}
\]
causative + reflexive
(99) Pe ke=li=ko nòe-pè=pe pe=fu tangpaja.

3SG.F 3SG.NF=do=OBV body-3SG.F.GEN=3SG.F.DAT 3SG.F=see.F mirror
'He made her see herself in the mirror.'

\subsection*{13.6.2 Applicative + other valency-changing process}

Applicatives do not combine with other valency-changing processes. This is based on a variety of factors, lexical, semantic and syntactic. Lexically we find that since applicatives are restricted to verbs of motion, they cannot appear on causative constructions, which are all formed with either the verb li 'do' or leng ' "give" ', neither of which is eligible for an applicative suffix. Similar conditions might apply to an applicative of a reciprocal, formed with li, or an applicative of a passive, which uses a non-motion predicate (note that, on the other hand, a reciprocal can be formed on the basis of an applicative construction - see below).

Ungrammatical: applicative + causative or applicative + reciprocal
\[
\begin{align*}
& \text { * te=li-na }  \tag{99}\\
& \text { 3PL=do-APPL } \\
& \text { 'They make X (go) to Y' / 'They VERB each other up to Y' }
\end{align*}
\]

Ungrammatical: applicative + passive
(99)
* mòng te=wí-na
wound 3 PL=get-APPL
'They were hit to (Y)'
A double applicative is not possible. The restriction here is semantic: the applicative can only index a goal argument, and so combinations are redundant. \({ }^{61}\)

Ungrammatical: applicative + applicative
* te-y-a-na-na pá=fue a

3PL=3PL-walk-APPL-APPL house=that
'They went to to that house.'
\(\begin{array}{ll}\text { * pá=fue a } & \text { te-y-a-na-na } \\ \text { house=that } & \text { 3PL=3PL-walk-APPL-APPL }\end{array}\)
Finally, applicatives of reflexives are not possible. This is partly semantic, in that a verb that allows a reflexive construction is not one that has an inherent goal complement, but also syntactic: recall from 13.4 that a semantically reflexive clause is still syntactically bivalent, and so it fails to meet the monovalent criterion that applicatives require.

Ungrammatical: applicative of a (pseudo-)reflexive
\begin{tabular}{ll} 
* pe pe=fí-na & ke=bálèng-pè=pe \\
3SG.F & 3SG.F=meet-APPL \\
3SG.NF=ghost-3SG.F.GEN=3SG.F.DAT
\end{tabular}
'She met her own ghost.'

\section*{XXXXXXX}

\subsection*{13.6.2 Passive + other valency-changing process}

Passives do not combine with other valency changing processes. For some of these combinations there are good reasons for the ungrammaticality: a reciprocal construction does not have a 'spare' participant to be coded as subject other than the existing one. Crucially, however, the passive in Skou is a lexical passive, restricted to an alternation with just one other verb, 'hit', and so passives cannot be formed from other predicates.

\subsection*{13.6.2 Reflexive + other valency-changing process}

The reflexive of a causative is grammatical, though it is more usual to code such an event with an explicit description of the body part that is affected.
\[
\begin{array}{lll}
\text { Nòe-ké=ke } & \text { ke=li=ko } & \text { héfèng }  \tag{99}\\
\text { body-3SG.NF.GEN=3SG.NF.DAT } & \text { 3SG.NF=do=OBV } & \text { good } \\
\text { 'He made himself better.' } & &
\end{array}
\]

\footnotetext{
61 Languages with applicatives for more than one semantic role allow for multiple applicative constructions, attested in, for instance, Kinyarwanda (Gerdts 1992, Donohue 1999). The following Tukang Besi example illustrates this possibility.

Tukang Besi
(i) No-wila-ngkene=ako te ina=no te WaKi'i.

3R-go-COM=APPL CORE mother=3GEN CORE Wa Ki'i
}
\begin{tabular}{lll} 
Nò-ké=ke & \(\mathrm{ke}=\mathrm{li=ko}\) & héfèng \\
hand-3SG.NF. GEN=3SG.NF.DAT & \\
'He made his hand better.' & &
\end{tabular}

With the other valency changing devices we do not find combinations with reflexives. This is expected with passives and reciprocals on syntactic grounds, and the inability of a reflexive to occur with an applicative is based on the semantic incompatibility of motion towards a goal with a reflexive notion.

\subsection*{13.6.2 Reciprocal + other valency-changing process}

A reciprocal construction based on a causative should be possible, except that the morphology used to encode both the causative (li 'do') and the reciprocal is the same. This means that it is possible to construct sentences with reciprocal of causative meanings, but these reciprocal readings are only a subset of the possible readings associated with such a construction, and we can only conclude that there is no true reciprocal of causative combination.
\begin{tabular}{ll} 
Pe=tue=ko & ke=fue. \\
3SG. \(=\) =3SG.F.do=OBV & 3SG.NF=scared \\
'She scared him.' &
\end{tabular}
\[
\begin{array}{ll}
\mathrm{Ke}=\mathrm{li}=\mathrm{ko} & \mathrm{pe}=\mathrm{fu} .  \tag{99}\\
\text { 3SG. } \mathrm{NF}=\mathrm{do}=\mathrm{OBV} \text {, } & \text { 3SG. } \mathrm{F}=\text { scared. }
\end{array}
\]
(99) Te te te=ti=ko te=fe.

3PL 3PL 3PL=do.PL=OBV 3PL=scared.PL
'They \({ }_{i}\) scared each other \({ }_{i} /\) them \(_{j}\).'
Reciprocal constructions are permitted with applicative clauses. The following examples show how two simple applicativised clauses can be combined with a reciprocal construction. Note that here the applicative morpheme is licensed on the verb in (99), despite that verb not being inherently a motion verb. This implies that the restrictions seen in 13.6.2 are not purely semantic, but have some element of syntactic restriction (the nature of the construction coded) as part of their specification as well.
(99) \(\mathrm{Pe} \mathrm{pe}=\mathrm{w}-\mathrm{a}-\mathrm{na} \quad \mathrm{ke}=i n g \mathrm{a}\).

3SG.F 3SG.F=3SG.F-walk-APPL 3SG.NF=the
'She walked up to him.'
(99) Ke ke=k-a-na pe=ing a.

3SG.NF 3SG.NF=3SG.NF-walk-APPL 3SG.F=the
'He walked up to her.'
(99) \(\mathrm{Te}=\) ing a te=ti-na.

3 PL=the 3 PL=3PL.do-APPL
'They walked up to each other.'
Reciprocals do not combine with passives, reflexives, or other reciprocals.
'She went with Wa Ki'i for her mother.'

\subsection*{13.7 A summary of valency-affecting processes in Skou}

We have seen that both bound morphology and periphrastic constructions are used in Skou to indicate processes that involve a change in the valency of the clause. Because of this, there are no formal grounds for describing 'valency-change' as a morphologically unified process. Because of the unified nature of their functions, however, we can group them together. We can characterise the different constructions that we have examined in this chapter by means of the diagramme in table 161.

Table 161. Valency changing constructions compared
\begin{tabular}{|c|c|c|c|c|}
\hline & & Verbal & Nominal & Bound \\
\hline +A & causatives: & Ii & & \\
\hline -A & passive: & wí & & \\
\hline +P & applicative: & & & -na \\
\hline -P & antipassive: & \multicolumn{3}{|r|}{\multirow[t]{2}{*}{- not attested in Skou -nòe-poss}} \\
\hline \(\mathrm{A}=\mathrm{P}\) & reflexive & & & \\
\hline & reciprocal & Ii & & \\
\hline
\end{tabular}

As can be seen, a great variety of valency-changing devices are found in Skou, with only a marked antipassive being absent from the inventory.

\section*{14 Adjunct nominals}

The grammatical functions 'subject' and 'object' are well-established in both the formalist and functionalist linguistics literature, as is the status of 'oblique' or 'adjunct' arguments as distinct from the subcategorised arguments (there are no syntactic reasons to distinguish obliques from adjuncts from each other in Skou, or in many other languages of New Guinea, other than the obligatory nature of the obliques compared to adjuncts). In many languages, however, there is another class of nominal function, which is more part of the semantic specification of the predicate than a fully independent nominal. T. Mohanan \((1995,1997)\) and Butt \((1995)\) discuss the status of these nominals in Hindi, but they are at least as widely attested in the languages of New Guinea, and Skou is no exception to this. In this chapter we shall discuss the syntactic behaviour of these nominals, which have been termed 'adjunct nominals' in the Papuanist literature, in Skou. To gain a perspective I shall compare the syntactic traits of adjunct nominals in Skou with the parameters of behaviour observed in other languages in the region and beyond, as well as examining their semantic and lexical scope.

\subsection*{14.1 An extra grammatical function: the 'adjunct nominal'}

A reasonably large number of verbal predicates in Skou are composed of two distinct phonological parts: there is the inflecting verb root, which takes all agreement marking and any tense/aspect marking, and which, because the verb is semantically 'light', additionally requires an adjunct nominal to fully specify the semantics of the predicate. Some examples of this are found in the following sentences. Here we can see the general affective verb ká, which we may gloss as 'hit' based on the sense it has when occurring simply with two nominals. This verb \({ }^{62}\) can combine with a nominal, which is neither A nor P , that is positioned outside the inflectional scope of the verb, but nonetheless is essential for the whole predicate's meaning.
```

Naké=fuea ke kóeng ke=ká.
dog=that 3SG.NF tooth 3SG.NF=hit
'The dog bit him.'

```

Some examples of lexicalised collocations involving a nominal and the verb ká 'hit' are shown below.

\footnotetext{
62 Also the normal suppletive forms, láng with a feminine object, and jí with a plural object. The fact that all suppletive forms of the verb occur in all of the 'idiosyncratic' and possibly lexicalised collocations of the sort described here suggests that the verb, and its suppletive forms, is linked in the lexicon to the nominal in some way. See Butt and Lahiri (2002) for discussion of the stability of a similar construction in Indo-European languages.
}
(2) Ku ke nì ráue ke=ká i li. child 3SG.NF.ERG 1SG laughter 3SG.NF=hit be do 'The child laughed at me.'
\begin{tabular}{llll} 
Lí & te= \(\boldsymbol{j}-\boldsymbol{a}\) & e & ti. \\
festival & 3PL=3PL-hit & 3PL.be & 3PL.do
\end{tabular}
'They're holding a festival.'
(4) Ke hang hèng ke=ká i li. 3SG.NF coconut accusation 3SG.NF=hit be do 'He made accusations concerning his coconuts.'

The next examples differ in that the adjunct nominal is not adjacent to the verb, being separated from it by the affected argument.

\section*{Féng ne ke=jí.}
wind 1PL 3SG.NF=hit.PL 'The wind's blowing on us.'
```

Fu ke ke=ká.
rain 3SG.NF 3SG.NF=hit
'The rain soaked him.'

```
```

Oe pe ke=láng
burp 3SG.F 3SG.NF=hit.F
'She burped.'

```

In the examples above kóeng, ráue, lí, hèng, féng, fu, and oe are not the subject of their clauses, nor the object, and they do not appear in the postverbal oblique position. These nominals shall be termed, for the while, 'adjunct nominals', though they are better thought of as adjuncts to the verb, and not to the clause. Descriptions of what appear to be related phenomenon in Australian languages refer to it as 'coverb + verb' (Wilson 1999 on Wagiman; it is not clear what the basis is for Wilson's decision that the non-inflecting non-verb is a 'coverb', as opposed to a noun) or 'preverb + verb' (Warlpiri). Mohanan (1982), describing similar structures in Malayalam, refers to it simply as an X ' constituent, and T. Mohanan \((1995,1997)\) describes the 'NV complex predicates' in Hindi. Butt (1995) provides extensive argumentation on the status and nature of these constructions in Urdu.

An adjunct nominal does not satisfy the subcategorisation requirements of a bivalent verb. For instance, the verb lùng 'teach' requires both the adjunct nominal na and a thing that can be taught, as well as its subject, in order to appear in a grammatical clause:

The examples above show that the adjunct nominal cannot satisfy the subcategorisation frame of a bivalent verb. Despite this, the adjunct nominal is not optional in the sentence, as can be seen from the ungrammatical (9).

> * ne te M áwo pílang tè te ne rùng ke ne ti
> 'we're teaching him the Skou language'

This condition on obligatory appearance is present even if the adjunct nominal is not found independent of the adjunct nominal construction, and even if the verb is not found in any contexts without the adjunct nominal (and so the two cannot be said to have productively independent semantics). This is the case for na lùng 'teach', but not the case for the adjunct nominal + verb in the following construction:
(10) Pe ku pe=tue.

3SG.F child 3SG.F=3SG.F.do
'She gave birth.'
In this sentence the nominal ku 'child' is also found independently in other constructions, functioning as a free nominal, as in the following sentence:

Ku=ing a rúrú ke=léng i li.
child=the hide.and.seek 3SG.NF=hide be do
'The child is playing hide and seek.'
In yet other contexts the root ku is encountered as one part of a compound, such as kulílong 'twin(s)' (lílong is not otherwise attested as an independent lexeme) or angku 'young child' (with ang elsewhere attested with the meaning 'young, unmarried'). Similarly, the light verb li 'do' (tue for 3SG.F) is found in other adjunct nominal constructions, and without any adjunct nominal is found with the sense 'make, cause', as in the following examples (li is also used with aspectual functions - see 7.9).
```

Pe pá pe=tue.
3SG.F house 3SG.F=3SG.F.do
'She built a house.'

```
```

Pe nì=li pe pá hápa pe=tue-tue.
3SG.F 1SG=do 3SG.F house small 3SG.F=3SG.F.do
'I made her build a small house.'

```

In some cases the adjunct nominal fails to adequately specify the semantics of the predicate, though this may simply reflect the cultural divisions that existed prior to contact. For instance, compare the alternative translations of the following sentence:
(14) Ke rópu-nì=ne yatà ke=li.

3SG.NF book-1SG.GEN=1SG.DAT transaction 3SG.NF=do
'He bought a book for me.'
'He sold my book.'
Disambiguation is only possible by serialising with the verb ké 'get'; when it appears before yatà li the serial verb construction means unambiguously 'buy', and when ké is put after yatà li the only interpretation possible is 'sell'. The following two sentences differ only in the placement of the inflected ké, but show opposite semantics.
\begin{tabular}{llll} 
Ke rópu-nì=ne & ke=ké & yatà & ke=li. \\
3SG.NF book-1SG.GEN=1SG.DAT & 3SG.NF=get & transaction & 3SG.NF=do \\
''He sold my book." & & \\
* 'He bought a book for me.' & &
\end{tabular}
(16) Ke rópu-nì=ne yatà ke=li ke=ké

3SG.NF book-1SG.GEN=1SG.DAT transaction 3SG.NF=do 3SG.NF=get
'He bought a book for me.'
* 'He sold my book.'

We have now surveyed the main uses of what we are calling 'adjunct nominals' in Skou. This label is used because on the one hand these words do are more related to nouns than to any other word class, and on the other hand their function is as a sort of 'adjunct' to the verb. We have not yet described their formal properties, and we shall attempt to delimit their use formally following an excursion into the behaviour of similar constructions in other languages of New Guinea.

\subsection*{14.2 Adjunct nominals in other languages of New Guinea and its region: a brief survey}

Adjunct nominals are widely reported in other languages of New Guinea and Australia, functioning essentially as semantic specifiers on verbs that lack a closely defined conceptual structure. The following example from Asmat (Foley 1986: 120) illustrates adjunct nominals specifying an essentially semantic content-free light verb (data from Voorhoeve 1965).
```

Asmat:
po yi-
paddle say-
'to paddle'

```

Ross (1980: 90), discussing adjunct nominal constructions in Dumo (which he calls 'complement + verb combinations') allows for three functional conditions that can be used to diagnose the presence of these constructions; any of these are taken to be sufficient to diagnose an adjunct nominal construction:
(a) the morpheme preceding the verb does not otherwise occur as an independent word
(b) the verb is one with a very wide range of meaning and the preceding morpheme therefore plays a major role in determining meaning in context
(c) the morpheme + verb combination itself takes an object

Examples of these three criteria working in adjunct nominal constructions in Dumo are illustrated below (sentences from Ross 1980: 91). In the first example, the only specification of the manner of motion is by the use of the nominal lüs, 'walking', which also appears as part of other nominals, such as lừddi 'road'. 63 This, then, satisfies Ross' first criterion.
- Dumo
(18) Hé lûs ha.

3SG.M walking 3SG.M.go
'He walks.'
The next example fulfils Ross' criterion (b): it shows a semantically unspecified light verb 'do' with a nominal, nú 'hand', that combines with it to have a conventionalised sense 'fight'. Since

\footnotetext{
63 The parallels to the Skou case for 'walk', with perfectly cognate morphemes, is striking (see 7.5).
}
nú appears in other contexts not associated with fighting, and hle also has no implicit specification of fighting, it is only the combination of the inflectable light verb and the semantically contentful nominal that has a meaningful interpretation.
\begin{tabular}{lll} 
Dumo & \\
Hé & nú & hle. \\
3SG.M hand & 3SG.M.do \\
'He fights.' &
\end{tabular}

Criterion (c) is demonstrated in (20), in which the existence of the adjunct nominal sí 'arrow' does not preclude the presence of an affected nominal (here, dís, 'bird') that serves as the object of the clause.

\section*{Dumo}
\begin{tabular}{llll} 
Hé dís & sí & hle. \\
3SG.M bird \\
'He hunts birds.'
\end{tabular}

Austin (1982) discusses what he calls 'cognate objects' in Australian languages, a grammatical category closer to the adjunct nominal discussed here than to the English grammar notion of cognate object. He points out the fact that, while there can be two nominals in a clause, neither of them behave as one would expect the subject of a bivalent verb to behave, with respect to case marking. Neither of the nominals may take ergative case, or accusative case, for instance.

Examining other languages in New Guinea and beyond, we find that Ross' criteria define an extreme: the definition offered for Vanimo is that a nominal is not independent, the verb is semantically bleached, and the nominal+verb unit itself takes an object. In addition to a construction meeting this constellation of criteria, which together will incontestably define an adjunct nominal construction, there are also many related constructions which fail to meet one or the other of these criteria. For instance, it might well be that the nominal involved in the construction is attested elsewhere in the language, or that the verb root is not found anywhere else except in this one predicate, making it a moot point as to how semantically (or otherwise) bleached it can be considered. Finally, there are many N+V predicates which are monovalent, in the sense that they do not take objects. Illustrating all of these points is the Skou translation of the Dumo sentence seen in (18); the Skou version is presented here as (21), and as can be seen is both morphologically and syntactically very similar.
\begin{tabular}{lll} 
Ke lòeng & ke=k-a. \\
3SG.NF path & 3SG.NF=3SG.NF-walk \\
'He walks.' &
\end{tabular}

Here we can see clearly that all the lexical morphemes, and their relative positions, are cognate with those seen in Dumo; the only difference is the addition of the pronominal proclitics on the verb in Skou, a morphological addition which is a feature unique to Skou in the close group of languages to which it is related (see figure 1 in 1.4), though a feature which finds parallels in other, more distantly related languages (see 7.8.1 for some examples). In this predicate, however, unlike the Dumo case the nominal is found freely elsewhere, in the compound lòengma 'path' (the element -ma is not attested elsewhere). The verb, too, is semantically explicit, denoting only walking (or, at the widest sense, movement by leg). Finally, the predicate does not license an object. All three of Ross' criteria are failed, yet the construction is still one involving a non-subject, non-object nominal, and a verb, predicating the clause.
T. Mohanan \((1995,1997)\) describes a similar construction in Hindi, and notes that we can identify two distinct types of nominal + verb predicate in that language, and further types in other south Indian languages, such as Malayalam (see 14.3). In the languages of the Piore river branch of the Macro-Skou family (see 1.4) we find a particularly interesting variant on this construction, that goes completely against the spirit of Ross' criteria. In these languages there are some NV complex predicates that are composed of a semantically bleached, or semantically underspecified nominal, and a semantically explicit inflecting verb root. Examine the following sentences from Barupu.

\section*{Barupu} ‘feelings’ R-3SG.F-be.happy-1SG.M 'I \(\mathrm{I}_{\text {male }}\) 'm happy.'
```

0 k-o-taipe-na.
'feelings' R-3SG.F-be.sad-1SG.M
'Imale'm sad.'
O k-ana-kina.
`feelings' R-1SG.M-remember
'Imale remember.'

```

In these sentences the adjunct nominal, 0 'feelings', is the same in all cases: it cannot be taken to be contributing any semantic specification to the predicate. The semantic content is all found in the verb roots, ro 'be happy', taipe 'be sad', and kina 'remember' (which also display different inflectional paradigms, though that is beyond the scope of the discussion here). Here the construction is the same, but the putative motivation for the nominal's presence, providing specific semantic content to an underspecified verb root, cannot be a functional explanation for the construction. Barupu contains more than enough semantically explicit verb roots, but nonetheless many predicates also require an adjunct nominal to be grammatically complete.

The reported paucity of verb roots in Dumo, and the lack of the widespread use of serial verb constructions (at least in reports), necessarily make adjunct nominal constructions a highly productive mechanism in Vanimo. In Skou there are also many adjunct nominal predicates, as seen in the following example. Here both hí 'wash' and some representation of the water are required for the clause to be judged grammatical. It is possible for a more specific noun than pa to be used to satisfy this requirement.

\section*{[NOUN VERB]}
\begin{tabular}{lll} 
(25) & Nì pa nì=hí & tí. \\
& SGG water 1SG=wash & sea
\end{tabular}

The greater number of semantically explicit verb roots in Skou, compared with Vanimo, means that the role of adjunct nominals in Skou is less salient than that in Vanimo. One form of adjunct nominal construction that is widespread in many languages of New Guinea is lacking in

Skou. This is the adjunct nominal involuntary state predicate construction, such as the following:

Lani
An andi e' nakerak.
\begin{tabular}{lll} 
An \(\quad\) [ADJ.NOM & anti ] & et-nap-q-e-taq \\
1SG & sickness & do-1SG.P-R-3SG.S/A-PAST \\
'I was sick.' & &
\end{tabular}

The adjunct nominal slot in the above sentence is in fact a phrasal category, in T . Mohanan's terms, as it may be filled by a phrasal category greater than simply a noun, as shown in the following expansion of the sentence seen above. It does appear that, while greater than the lexical category N , the unit we are describing is not as large as an NP. In most Papuan languages, for instance, modification by a demonstrative is not possible for an element in this position, nor is case marking. Compare the following sentences in Lani, a highlands language of Papua. Here we can see that, in addition to simply having andi as an adjunct nominal, it is also possible for the nominal to be modifies by an adjective, itself modified by adverbials. But the nominal may not be modified by a demonstrative (or possessed).

\section*{Lani}

An andi abu nggok togon e'nakerak.
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline An & [ADJ.NOM & anti & apu & nq09 & togon] & et-nap-q-e-taq \\
\hline 1SG & & sickness & very & big & like.that & do-1SG.P-R-3SG.S/A-PAST \\
\hline \multicolumn{7}{|l|}{'I was really sick.'} \\
\hline \multicolumn{7}{|l|}{*an [ \(\mathrm{N}^{\prime} / \mathrm{NP}\) andi \(\begin{aligned} & \text { ti ] e'naker } \\ & \text { that }\end{aligned}\)} \\
\hline
\end{tabular}

It seems likely that, while clearly a unit greater than a single lexeme, the adjunct nominal is best described as being less than a full NP. T. Mohanan (1997) identifies two parameters that are necessary to describe the variation that she observes within Hindi, namely the 'size' of the non-verbal element in the construction, and the status of this element. The first of these parameters refers to whether the unit in question is simply a lexeme, or can be a phrasal unit; this can obviously be easily checked. The second is more subtle, and involves determining whether the adjunct nominal is simply part of the complex predicate, or is in fact a subcategorised-for argument of the predicate, which does help to specify the semantics of the predicate (in the same way that the choice of object in the two English phrases eat an apple and eat some noodles specifies the kind of action depicted by the verb eat). These two parameters will be discussed in the following sections.

\subsection*{14.3 The 'size' of the adjunct nominal}

One of the parameters that Mohanan found to be a variable in the constructions that she examined in Hindi concerned the 'size' of the adjunct nominal: is it a lexical node, or a phrasal node? That is, is the adjunct nominal limited in size to a single word, or can it be a phrasal unit greater in size than that? This is a parameter that varies both across languages and within the one language.

We may illustrate the issues involved with a short example from Skou. Examine the following sentence:
\begin{tabular}{|c|c|c|c|c|}
\hline Kúci & nà & te=òe & e & ti. \\
\hline marbles & play & 3PL=play & 3PL.be & 3PL.do \\
\hline 'They're & aying & marbles.' & & \\
\hline
\end{tabular}
(I have no idea about the origin of the word kúci. The [ \(\mathrm{t} \mathrm{j}^{\circ}\) ] is suggestive of borrowing, since it does not occur in native words, but Dutch knikker and Indonesian (ke)lereng are not likely sources. A \(/ \uparrow j /\) phoneme is found in Nyao and Wutung to the east, but I have no information about this lexeme in those languages.)
The question that must be asked concerns the status of the words kúci 'marbles' and nà 'play' in (29). There are three immediately obvious analyses that might account for the data above:
1. kúci is the object of the [adjunct nominal + verb] construction;
2. kúci serves as an adverbial element in the clause, and the predicate is the same [adjunct nominal + verb] unit that was described in the first analysis;
3. kúci is part of the [adjunct nominal + verb] construction, modifying nà.

The structural differences represented in these three possibilities are shown in (29)'- (29)"'.
(29)' [np:ObJ K úci ] [v, [ N : ADJ. NOM. nà ] [v te=òe e ti ] ].
(29)" [adverbial Kúci ] [ \(\mathrm{v}^{\prime}\) [ \(\mathrm{N}^{\prime}\) : ADJ. nom. nà ] [v te=òe e ti ] ].
(29)"' [ v ' [ N : ADJ. nOM. Kúci nà ] [v te=òe e ti ] ].

We can only decide on which of these analyses is more appropriate after examining the possibilities for adjunct nominals that are elsewhere attested in the language in other, less ambiguous, cases.

For some nominal+verb collocations the adjunct nominal is optionally a phrasal unit, and not simply a lexical one. The following sentences show modified nouns in the adjunct nominal position. In (30) the expression na te=òe 'they played' is expanded to [ \(x\) ' na nawò] te=òe 'they played a lot', with a modifier inside a phrasal unit headed by na. Similarly in (31) we can see that the simple \(\mathrm{N}+\mathrm{V}\) predicate pí ne=ti 'we talked' is expanded with an adjective modifying pí, and in (32) na is expanded with a reduplicated form of the adjective fèng 'bad'. In (30) the bird species name is being used metaphorically.
\begin{tabular}{lccccc} 
Tángpe & [N+ADJ na & nawò \(]\) & te=òe & e & ti, \\
\begin{tabular}{ll} 
small.bird(sp.) & play
\end{tabular} & many & 3PL=play & 3PL.be & 3PL.do
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|}
\hline anake & [N+ADJ \({ }^{\text {pí }}\) & háháfa ] & ne=ti & ne & ti. \\
\hline 1DU.EX.NF & speech & slow & \(1 \mathrm{PL}=1 \mathrm{PL}\). do & 1PL.be & 1PL.do \\
\hline 'we'd just sit & d talk quietly, & & & & \\
\hline
\end{tabular}
\begin{tabular}{lllll} 
pe=bà & [N+ADJ ná & fèng-fèng ] & pe=òe e & tue-tue \\
3SG.F=person & play & bad-RED & 3SG.F=play & 3SG.F.be \\
'a 3SG.F.do-RED
\end{tabular}
(Notice the H tone melody from the HL associated with fèng in the adjunct nominal constituent in this last expression has spread to the nominal that heads the X ', na, now ná.)

This behaviour indicates that constituents serving as adjunct nominals can be larger than simple lexical items, and are more like phrasal categories, thus providing support for the third
possibility proposed for (29) shown in (29)"'. It does not, however, seem that these adjunct nominal units are full phrasal projections from the N (that is, they are not full NPs). An NP with a demonstrative may not be used in the adjunct nominal position:
\[
\begin{align*}
& \text { * te=angku=ing a [ } \mathrm{v} \text { ' [ } \mathrm{N}+\mathrm{dem} \text { nà=fue a] te=òe ] e ti-ti }  \tag{33}\\
& \text { 3PL=child=the play=that 3PL=play 3SG.F.be 3PL.do-RED } \\
& \text { 'the children are playing that game' }
\end{align*}
\]

In order to grammatically express this notion, 'that game' must be coded as a nominal, and a separate adjunct nominal, this time a bare nominal, must be used as well.
\[
\begin{align*}
& \text { Te=angku=ing a [nP nà=fue a] [ } \mathrm{v} \text { [ } \mathrm{N} \text { nà ] te=òe ] e ti-ti. }  \tag{34}\\
& \text { 3PL=child=the play=that , play 3PL=play 3SG.F.be 3PL.do-RED } \\
& \text { 'The children are playing that game.' }
\end{align*}
\]

It seems that the 'adjunct nominal' can be greater in size than a single word, but that if the 'adjunct nominal' is a phrasal category, it is one that is intermediate in size between an N and an NP ; for simplicity's sake I shall refer to it as an N'.

Are all adjunct nominal constructions alike in allowing for \(\mathrm{N}^{\prime}\), as opposed to simple \(\mathrm{N}^{0}\), adjunct nominals? The example that we have just examined involve a semantically highly specific nominal, combined with a semantically highly specific verb. Furthermore, in the case of nà oe 'play', neither the nominal nor the verb is found independently of the adjunct nominal construction. These factors seem to be relevant to the determination of the amount of N modifying material that may appear in the construction: the more highly constrained the words involved, the more modification they allow. Not all examples of adjunct nominals are so constrained, with the less syntactically constrained words, in terms of their being independently attested in constructions apart from the adjunct nominal one, being less free to combine with other modifiers in the adjunct nominal construction. A representative sample of other uses, in which the noun and the verb are both found outside the adjunct nominal construction are assembled in table 162.

Table 162. Some nominal + verb expressions in Skou
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{2}{|l|}{Nominal} & \multicolumn{2}{|l|}{Verb} & \multicolumn{2}{|l|}{Expression} \\
\hline pìng & 'bow' & Iú & 'release' & pìng ke=lú & 'shoot' \\
\hline tánge & \({ }^{\prime} \mathrm{leg}\) ' & Iú & 'release' & tánge ke=lú & 'kick' \\
\hline ku & 'child' & Ii & 'do' & ku pe=li & 'give birth' \\
\hline (N) & (noun) & li & 'do' & X ke=li & 'make X' \\
\hline (N) & (noun) & Ii & 'do' & X ke=li & 'have an X' \\
\hline pí & 'language' & Ii & 'do' & pí ke=li & 'speak, orate' \\
\hline péngpèng & 'sneeze' & Ii & 'do' & ke= péngpèng li & 'sneeze' \\
\hline pung & 'liver, 'heart' & Ii & 'do' & pung ke=li & 'like, want' \\
\hline na & & li & 'do' & na ke=li, ke=na li & 'play' \\
\hline tanghang & 'face' & Ii & 'do' & ke=tanghang li & 1. 'be dizzy' \\
\hline tóe & 'tree' & Ii & 'do' & (rí)tóe ke=li & 2. 'give birth' 'chop down a tree’ \\
\hline
\end{tabular}
\begin{tabular}{llllll} 
lí & 'festival' & ká & 'hit' & líte=tit & 'hold a festival' \\
kóeng & 'tooth' & ká & 'hit' & kóeng ke=ká & 'bite' \\
yong & 'pith' & ká & 'hit' & yong ke=ká & 'squeeze pith' \\
\hline
\end{tabular}
\(\dagger\) Holding a festival takes more than one person, so the verb must occur with a plural subject; *lí ke li, for instance, with a singular subject and the base form of the verb, is not acceptable.

One extremely common use of the adjunct nominal construction with li 'do' as the verb involved a sense of making or producing something. Some representative (but by no means exhaustive) examples are shown in table 163.

Table 163. N+li meaning 'make, produce N '
\begin{tabular}{llll}
\hline \hline Nominal & & Nominal + do & \\
\hline Iómó & complaint & lómóli & 'grumble, complain' \\
ku & child & ku li & 'give birth to a child' \\
pu & carving & pu li & 'carve, write' \\
hòe & sago & hòe li & 'stir sago to make sago jelly' \\
\hline \hline
\end{tabular}

With these highly productive adjunct nominal constructions, in which both elements are more or less independent lexemes, we find, somewhat paradoxically, perhaps, the least degree of modificational freedom for the nominal. Where there exists the possibility of lexical expansion in the N position, the possibility of phrasal expansion into an \(\mathrm{N}^{\prime}\) appears to be restricted. For example, a basic adjunct nominal construction involving two independent lexemes is shown in (35).
\[
\begin{align*}
& \text { Pe ku pe=tue. }  \tag{35}\\
& \text { 3SG.F child 3SG.F=3SG.F.do } \\
& \text { 'She gave birth to a child.' }
\end{align*}
\]

If we wish to state that the woman in question gave birth to two children, we would employ a separate lexical item, ku-lílong 'twins' (transparently composed of the generic ku 'child' and the not-independently attested root lílong 'twins').
(36) Pe ku-lílong pe=tue.

3SG.F child-twin 3SG.F=3SG.F.do
'She gave birth to twins.'
Similarly, giving birth to a daughter can be indicated by using the lexeme for 'girl', rather than simply the underspecified 'child', as the adjunct nominal.
(37) \(\mathrm{Pe} \mathrm{pe}=a n g k u \quad \mathrm{pe}=\) tue.

3SG.F 3SG.F=child 3SG.F=3SG.F.do
'She gave birth to a daughter.'
It is not, however, permissible to expand the adjunct nominal with some non-compounding strategy, and so, for instance, express the giving birth to twins with a sentence like the one seen in (38).
\[
\begin{aligned}
& \text { (38) } * \text { pe ku hìngtung pe=tue } \\
& \text { 3SG.F child two } \quad \text { 3SG.F=3SG.F.do }
\end{aligned}
\]
'She gave birth to two children / twins.'

These examples show that the predicate translating as 'give birth' consists of the combination of a simple nominal, not a phrasal unit, with an inflecting light verb. Other lexicalised items, however, show clearly that in these other cases we are dealing with phrasal, and not just lexical, categories that combine with verbs. Examine the adjunct nominal predicates in table 164, where it is clear that the 'nominal' used is a lexicalised expression consisting of a noun and modifiers.

Table 164. Some \(N^{\prime}\) adjunct nominals with non-combinatorial semantics
\begin{tabular}{lllll}
\hline \hline Nominal & & & Nominal + 'do' & \\
\hline lú pong pong ya & 'eyes-closed-thing' & lú pong pong ya ke \(=1 \mathrm{li}\) & 'pray' \\
ya nóele & 'dirty thing'; 'sin' & ya nóele ke \(=1 \mathrm{i}\) & 'commit sin' \\
pí pong pong & 'closed speech'; 'whisper' & pí pong pong ke \(=1 \mathrm{li}\) & 'whisper' \\
\hline \hline
\end{tabular}

Contradictorily, these adjunct nominal constructions allow a semantically highly specific nominal, combined with a semantically highly specific verb, to have modifiers. How can we reconcile these disparate constraints on adjunct nominal size?

It transpires that the size of the adjunct nominal unit can be predicted on the basis of three independent parameters:
1. The lexical content of the inflecting verb:
- More highly specified verbs allow for more complex phrasal 'adjunct nominals';
- More generic verbs with little specific semantic content can only appear with simplex lexemes.
2. The degree of compositionality that obtains between the elements in the 'adjunct nominal':
- Semantically transparent combinations of noun + modifiers are allowed only with semantically explicit verbs;
- Opaque or lexicalised combinations of noun + modifier, such as those seen in table 164 xx , may occur with generic verbs.
3. The degree of productivity that is found in the semantic relationship between the verb and the 'adjunct nominal':
- the more productive a semantic relationship is, the less likely it is to allow for a phrasal 'adjunct nominal'.
It appears, then, that, as in Hindi, there are degrees of tolerance in the size of the adjunct nominal unit. Universally there are prohibitions: any modification must involve adjectives, or even most relative clause units, but cannot extend as far as marking by possessive strategies, or deictics.

\subsection*{14.4 The status of the adjunct nominal}

In the preceding section we saw that the adjunct nominals are best analysed as phrasal, not lexical, categories in Skou, but that their size is not as great as a full NP is expected to be. The other criteria that has been proposed to assess these constructions involves the status of this
nominal unit: it is part of the predicate, forming a tightly constrained unit with the inflecting verb, or is it an independent participant in the clause, able to participate in the sort of behaviour that characterises independent phrasal units inside the clause?

Firstly, we need to define what behaviour we are discussing. This must be behaviour that is specific to neither subjects or objects exclusively, but which includes both of them. The following list emerges:
- indexing on the verb by means of vowel alternations;
- participation in clause-external topicalisation structures;
- separability from the verb by instrumentally-marked nominals.

Examine the following 'basic' sentence, in which we can find a clause-initial time expression félangro, followed by a subject pronoun, pe 'she', and the complex predicate, ku li 'give birth'.
\begin{tabular}{lllll} 
Félangro & te & pe & ku & pe=tue. \\
year & 3SG.F.go & 3SG.F & child & 3SG.F=3SG.F.do
\end{tabular} 'She gave birth to a child last year.'

Various elements of the clause may appear with more salient, topical, pragmatic status. As such, they appear preclausally (see 4.2). The two grammatical variants of (39) that are related to it by topicalisation are shown in (40) and (41).
(40) Félangro te=fue a, pe ku pe=tue.
year 3SG.F.go=that 3SG.F child 3SG.F=3SG.F.do
'Last year, she gave birth to a child.'
\(\mathrm{Pe}=\) ing a , félangro te ku \(\mathrm{pe}=\) tue.
3SG.F=the year 3SG.F.go child 3SG.F=3SG.F.do
'Her, last year she gave birth to a child.'
Other sentences are also possible, with oblique locations topicalised, or even nominals only related to those present in the clause. Examples of these are shown in (42) and (43).
\begin{tabular}{llllll} 
Te Óeti=ing a, & félangro & te & pe & ku & pe=tue. \\
Wutung=the & year & 3SG.F.go & 3SG.F & child & 3SG.F=3SG.F.do
\end{tabular}
'In Wutung, last year she gave birth to a child.'
\begin{tabular}{lllll} 
Ke=baléng=ing a, félangro te & pe ku & pe=tue. \\
3SG. \(\mathrm{NF}=\) man=the & year & 3SG.F.go 3SG.F, child & 3SG.F=3SG.F.do \\
'That man, (his wife) gave birth to a child last year.'
\end{tabular}

A sentence with ku 'child' in a preclausal topic position, however, is not grammatical, as shown in (44).
\(\left.\begin{array}{l}\text { * ku=ing a, félangro te } \quad \text { pe } \\
\text { child=the year 3SG.F.go 3SG.F }\end{array}\right]\)\begin{tabular}{lll} 
pe=tue \\
that child, she gave birth to (it) last year'
\end{tabular}

Even if it is doubled within the clause in its normal position the adjunct nominal may not be fronted
\[
\begin{aligned}
& \text { (45) * ku=ing a, félangro te } \quad \text { pe } \quad \text { ku } \quad \text { pe=tue } \\
& \text { child=the year } \quad \text { 3SG.F.go 3SG.F child } \\
& \text { 'that child, she gave birth to (it) last year' }
\end{aligned}
\]

If the topical NP is more semantically explicit than the adjunct nominal they may both appear in the same sentence, but the adjunct nominal must be present in the clause in its normal, nontopical (typically preverbal) position. In this case the topic is not directly related to that adjunct nominal at all, as evidenced by the loose topic: comment relationship that is found in (46). An example of such a successful topicalisation is seen in (46), while (47) shows that the adjunct nominal must be retained in the predicate.
```

Pe=angku=ing a, félangro te pe ku pe=tue.
3SG.F=child=the year 3SG.F.go 3SG.F child 3SG.F=3SG.F.do
'That girl, she gave birth to (it) last year.'
* pe angku ing a, félangro te pe pe tue

```

There is only one circumstance in which an adjunct nominal can appear as part of a preclausal topic, and that is when the verb too is part of the topic structure. That is, it is only when the whole predicate is topicalised that an adjunct nominal can be topicalised, proving the inseparability of the two words. Whenever a verb is topicalised, it must be represented inside the clause in its normal position with the verb 'do', as described in 4.2, which in the case of the predicate we are dealing with here leads to an impression that the verb is still present inside the clause. This is not the case, and is simply the fortuitous result of the inflecting verb in the clause being 'do' as well as the substitution verb being 'do'.
\[
\begin{align*}
& \text { Ku pe=tue=ing a, félangro te } \begin{array}{c}
\text { pe } \\
\text { child } \\
\text { 3SG.F=3SG.F.do=the year } \\
\text { 3SG.F.go } \\
\text { 3SG. }
\end{array} \text { 3SG.F }  \tag{48}\\
& \text { 3SG.F=3SG.F.do }
\end{align*}
\]

The only instance in which the adjunct nominal can appear preclausally, then, is when the entire predicate is in that position. In Skou the unit that consists of an adjunct nominal and its inflecting verb cannot be separated. What can lie behind the ban on adjunct nominals alone appearing as topics? Several possibilities present themselves, but they are all related, and ultimately point to the same base.
- topics are complete phrasal units, not simple lexical items, and so adjunct nominals, which do not project full NPs, cannot participate in the topicalisation construction;
- the topicalisation of nominals is associated with deictic marking, which adjunct nominals are not eligible to take, since they are not full NPs, to which deictic marking attaches;
- the adjunct nominal is part of the clausal predicate, and so cannot be topicalised separately from the entire predicate since it does not project the phrasal unit that governs the predicate.

\section*{xxxxxxx}

Continuing this process, there are strong argument that a degree of 'univerbification' has occurred, or is occurring, with some of the adjunct nominal+verb constructions. This is found with those nominals that appear, or at least can appear, between the proclitic and the verb root. Similarly, the elements involved in verbal collocations (see 7.8) cannot be separated from each other, arguing for a lexically and morphologically complex, but syntactically simplex, treatment.

Most of these issues have been discussed earlier in this chapter in 14.5.1.2 and 14.5.1.3

\subsection*{14.5 The position of the adjunct nominal}

Adjunct nominals are found adjacent to the verb, as befits an element that is part of a predicate whose inflecting part is the verb. There are several issues in the analysis of adjunct nominals, involving verbal agreement, serial verb constructions, and the position of the nominal element with respect to the verb. These are dealt with separately in the sections that follow.

\subsection*{14.5.1 Preverbal adjunct nominals}

Most adjunct nominal constructions appear with the nominal preverbally. Of these, we may further classify them depending on where the nominal appears with respect to the proclitic agreement marker. There are two logical possibilities, shown in (99).
(99) 1: Adjunct nominal proclitic=verb root

2: proclitic=Adjunct nominal verb root
In fact a third possibility is found, in which the predicate alternates between these two options above.
(99) 3: Adjunct nominal proclitic=verb root
~ proclitic=Adjunct nominal verb root
These three different possibilities are discussed in the following sections.

\subsection*{14.5.1.1 Pre-clitic: the nominal precedes the agreement morphology}

This is the post common position in which adjunct nominals are found, and yet they are surprisingly few adjunct nominals are found exclusively in this position, without showing any positional variation. Some of the nominals that are only allowed in this position are:

Table 165. Post-clitic adjunct nominals
\begin{tabular}{|c|c|c|c|c|}
\hline ADJ.N+PRED & Independence? & individual meanings & combined meaning & Use \\
\hline mà me & no, no & (only together) & 'ridicule' & nì= mà me \\
\hline lemà pe & no, no & (only together) & 'criticise' & nì=lemà pe \\
\hline
\end{tabular}

In the case of these predicates the verb associated with the adjunct nominal is not found in other constructions, nor is the adjunct nominal. Despite this, they are always separated by a proclitic. Other predicates with pre-proclitic adjunct nominals have verbs that may appear with a range of meanings in different predicates, and some examples of these sorts of predicates are shown below.

Table 166. Pre-clitic adjunct nominals
\begin{tabular}{|c|c|c|c|c|}
\hline ADJ.N+PRED & Independence? & individual meanings & combined meaning & Use \\
\hline pìng lú & yes, yes & 'bow', 'release' & 'shoot' & pìng nì=lú \\
\hline làng lú & yes, yes & 'leg', 'release' & 'kick' & làng nì= \(=\) ú \\
\hline mòng wí & no, yes & 'get' & 'become wounded' & mòng nì = wí \\
\hline nupà wí & yes, yes & 'smell (n.)', 'get' & 'smell (tr.)' & nupà nì=wí \\
\hline
\end{tabular}

In addition to these pre-clitic nominal constructions, there are other examples of the nominal appearing before the clitic, but allowing for variation. These are discussed in 14.5.1.3.

\subsection*{14.5.1.2 Post-clitic: the nominal must appear inside proclitic agreement morphology}

Only a small number of verbs have what appears to be an adjunct nominal that must appear inside the proclitic. It is obvious that for hue fèng, in which both syllables are independently attested free morphemes ('stomach' and 'bad', respectively), that this is what is happening. With this predicate the vowel alternations found on the predicate indicate that we are not dealing with a topic-comment construction with a form of external possession.

With na lùng, on the other hand, there is no obvious phonological or morphosyntactic proof that the predicate is not in fact a verbal collocation of the sort described earlier in 7.8. The difference between this and hue fèng is that the n -initial syllable of na lùng does not show any overt prefixation, since \(n\)-initial verbs in Skou regularly do not inflect.

Table 167. Post-clitic adjunct nominals
\begin{tabular}{|c|c|c|c|c|}
\hline ADJ.N+PRED & Independence? & individual meanings & combined meaning & Use \\
\hline hue fèng & yes, yes & 'stomach', 'bad' & 'angry, seething' & nì=hue fèng \\
\hline na lùng & no, no & (only in combination) & 'teach' & nì= na lùng \\
\hline
\end{tabular}

This list of two is not exhaustive, but the small number of members is representative: there are very few verbs in which the adjunct nominal must follow the proclitic.

\subsection*{14.5.1.3 Variable: the nominal may appear either inside or outside the proclitic agreement morphology}

A quite large number of predicates involving adjunct nominals allow variation in the position of the adjunct nominal with respect to the agreement proclitic. Some examples of these are shown in table xx 168 .

Table 168. Variable position adjunct nominals


\section*{XXXXXXXXXX}

\subsection*{14.5.1.4 The evolution of variation in adjunct nominal coding}

One possible model for this behaviour might be that these adjunct nominal constructions that display variable placement of the nominal are in the process of being 'tried out' for reanalysis as verbal collocations. That is, the post-proclitic adjunct nominals might be being reinterpreted as part of a complex verbal collocation, of the sort described in 7.8 , and perhaps lose any status as an independent word. Table 169xx shows the cline between plain verbs and verbal collocations, with three different possibilities for adjunct nominals shown in between. The constructions with adjunct nominals preceding the subject proclitic are not problematic; the constructions shown as Adj nom: II are those in which the there is variation in the position of the adjunct nominal and the proclitic. Forms such as those in the Adj nom: III column are, as stated above, most rare, while the number of verbal collocations is quite large.

Table 169. Possible steps in adjunct nominal \(\rightarrow\) disyllabic collocation reinterpretation


By the final stage we have effectively reached a point of having a bipartite root, há-hi, with two separate positions for inflection.

Another instance of apparent adjunct nominal grammaticalisation involves the total loss of the segmental values for the adjunct nominal, but not of the suprasegmental values. Compare the following two ways of expressing the predicate 'He is angry.'

Angry: nominal predicate
(99) Ke hue fèng.

3SG.NF stomach bad
'He's angry.'

Angry: verbal predicate
(99)
\begin{tabular}{ll} 
Ke & ke=lì. \\
3SG. NF & 3SG. NF=angry \\
'He's angry.'
\end{tabular}

In the verbal predicate version we can see that the verb inflects according to the alveolar paradigm (see 7.2.2), with the consonant alternations that are always found with I-initial verbs. Compare the paradigm of the verb 'angry' with that of the verb 'do', in table 170xx.

Table 170. Inflectional paradigm of the verbs lì 'angry' and li 'do'
\begin{tabular}{lcl}
\hline \hline & 'angry' & 'do' \\
\hline 1SG & lì & li \\
2SG & pì & pi \\
3SG.NF & lì & li \\
3SG.F & tùe & tue \\
1PL & tì & ti \\
2PL & lì & li \\
3PL & tì & ti \\
\hline
\end{tabular}

It is quite clear that in all ways the verb for 'angry' is segmentally identical to the verb 'do', in all its (irregular) inflections, including vowel alternations. Tonally, however, it bears a falling pitch, indicating an underlying HL tone melody. The more-than-chance resemblances in structure are most likely the result of the reinterpretation of a construction similar to the following one from Nyao, which involves an adjunct nominal and the verb 'do'.

Nyao
(99) \(K_{i}\) fing \(r_{i}\).

3SG.NF bad do
'He's angry.'
Direct translations of this sentence can be found in many other languages related to Skou and Nyao. In Skou a sentence formed with the same morphemes would have the following form (though it is not attested in modern Skou, hence the *).
putative pre-Skou: Stage I
\(\begin{array}{lll}\text { * Ke } & \text { fèng } & \text { ke=li. } \\ \text { 3SG.NF } & \text { bad } & \text { 3SG.NF=do } \\ \text { 'He's angry.' } & \end{array}\)
The analysis proposed for the actually attested verbal form, seen in (99), is that clauses such as (99) were at a later stage reanalysed with the adjunct nominal and the verb forming a single unit, as in (99)'.
putative pre-Skou: Stage II
(99)' * Ke ke=fèng li.

3SG.NF 3SG.NF=bad do
'He's angry.'
Following this, the segmental information associated with fèng 'bad' was lost, leaving only the HL tone to be borne by what had been the segments of the verb 'do'. This results in an altered
inflecting verb, as in (99)". Now the tone that was associated with the adjunct nominal overwrites the original L melody associated with the light verb.


This model accounts for one way in which the verbal lexicon of Skou has been expanding since pre-Skou days, and why there are so many near-homonyms in the verbal lexicon involving li ‘do'. These newly minted words are differentiated either by tone or by an irregular inflection in one or more cells of the agreement paradigm, with the tone being acquired from a previous adjunct nominal, or the deviant inflectional paradigm being a speaker-innovated esoterogenic feature initiated in response to their sociolinguistic environment (see 1.4, 1.7).

\subsection*{14.5.2 Postverbal adjunct nominals}

We find several different constructions involving adjunct nominals in Skou. The predicted preverbal forms are found, and these have been extensively discussed in the preceding sections of this chapter. Some examples of these sorts of constructions are the following:
(99) Preverbal adjunct nominal
\begin{tabular}{llll} 
ta hùng & 'sit' & & \\
ong e & 'refuse' & & \\
we lí & 'hang.TR' & & \\
pi li & 'speak' & pí & language \\
na lung & 'teach' & & \\
na lu & 'pound (sago)' & & \\
pìng lú & 'shoot' & pìng & bow \\
ra li & 'burn.INTR' & ra & fire
\end{tabular}

In addition to this we also find one instance of what appears to be a postverbal adjunct nominal. It is debatable as to whether this is a \(\mathrm{N}+\mathrm{V}\) unit, a \(\mathrm{V}+(\) non-inflecting \() \mathrm{V}\) unit, or simply a disyllabic V , though the evidence from aspect-marking reduplication (see 2.6 and 7.9 ) suggests that ráue is not verbal.
há ráue 'laugh'
xxxx

\subsection*{14.5.3 Occasional adjunct nominals}

With some predicates requiring adjunct nominals, it seems that the nominal is sometimes treated as the object of the clause, and sometimes treated as the adjunct nominal without object properties. Examine the following sentences, which clearly show that ho 'roof, roofing materials' is the object of the clause, and that there is not an adjunct nominal construction. The fact that possessive marking and adjectival modification may be found makes it clear that an entire NP is present.
(99) Hò nì=pi i li. roofing \(1 \mathrm{SG}=\) tie be do 'I'm tying roofing materials (together to make a roof).'
\[
\begin{align*}
& \text { [np Hò-mè=me nawò ] nì=pi i li. }  \tag{99}\\
& \text { roofing-2SG.GEN=2SG.DAT many } 1 \text { SG=tie be do }
\end{align*}
\]
'I'm tying lots of your roofing materials (together to make a roof).'
The same nominal with the same verb is also found with another object in the clause: in this case it must be functioning as an adjunct nominal, not as a full NP object. This can be tested by attempts to modify ho, which are ungrammatical in the presence of another NP serving as object, as seen in (99).
\begin{tabular}{llll}
\begin{tabular}{l} 
Pá-nì=ne \\
house-1SG. GEN=1SG.DAT
\end{tabular} & hò & nì \(=\mathrm{pi}\) & i li. \\
roofing & 1SG=tie & be do \\
'I'm roofing my house.'
\end{tabular}
\[
\begin{array}{llll}
\text { * pá-nì=ne } & \text { hò-mè=me } & \text { nì=pi } & \text { i li }  \tag{99}\\
\text { house-1SG.GEN=1SG.DAT } & \begin{array}{l}
\text { roofing-2SG.GEN=2SG.DAT }
\end{array} \\
\text { 'I'm roofing my house with your roofing materials.' }
\end{array}
\]

As the English translation might suggest, the appropriate way to express what is ungrammatically encoded in (99) is with either an instrumentally marked NP identifying the materials, or with a construction involving the verb ké 'get' specifying the materials as its object in a serial verb construction.
\begin{tabular}{|c|c|c|c|}
\hline \multicolumn{2}{|l|}{\multirow[t]{2}{*}{\[
\begin{align*}
& \text { Hò-mè=me }  \tag{99}\\
& \text { roofing-2SG.GEN=2SG.DAT }
\end{align*}
\]}} & nì =ké=ko & pá-nì=ne \\
\hline & & \(1 \mathrm{SG}=\) get=OBV & house-1SG.GEN=1SG.DAT \\
\hline hò & nì=pi i li. & & \\
\hline roofing & 1SG=tie be do & & \\
\hline 'I'm roof & fing my house with & your roofing m & materials.' \\
\hline
\end{tabular}
\[
\begin{array}{lll}
\begin{array}{l}
\text { Pá-nì=ne } \\
\text { house-1SG.GEN=1SG.DAT }
\end{array} & \begin{array}{l}
\text { hò } \\
\text { roofing }
\end{array} & \begin{array}{l}
n i ̀=p i \\
1 S G=t i e ~
\end{array}  \tag{99}\\
\text { hò-mè=me=pa. }
\end{array}
\]

\subsection*{14.6 Summary: adjunct nominal constructions}

We have seen that not only are the adjunct nominal constructions widespread in form and function, but that there are some conundrums associated with their interpretation. While most of the evidence suggests that they are part of the predicate, there is also clear data from the
restriction of floated quantifiers that suggests that they should be considered as separate arguments of the verb in their own right.

\section*{15 Complements and Control}

The behaviour of predicates such as 'want', 'tell', 'forget' etc. has received much attention by linguists, since these are among the predicates that take a non-nominal argument, but rather a clausal one, and particularly a clausal one in which one of the elements of the clause is controlled by one of the nominal arguments of the 'want', 'tell', 'forget' etc. verb. We may model the structure of these constructions in English, compared to a primary transitive verb, in (1).

\section*{English}

Structure of a PTV clause
(1)

a.



Structure of a clause with complement
b.


Although the basic word order is SOV in Skou, with both nominal arguments of the verb preceding it, there are also clauses with SVO order as basic: these are clauses headed by those predicates that have a comparatively low-transitive element. A complement clause is inherently a low-transitive kind of P , and so clauses with a complement clause as object pattern with the low-transitive clauses in having a basic SVO order. The basic structures found in Skou clauses are shown in (2).
Skou


Just as with complementation in English, some complement-taking verbs allow an argument of the complement clause to be treated as an argument of the main clause. This can be illustrated in English by comparing the clauses I saw that he was going, in which the borders of the complement clause are uncontroversial, with I saw him going, in which the subject of the complement clause appears with case marking typical of the object of the main clause. In Skou similar phenomena can be found, though they are more complex than the English ones described here.

The following sections present information on the distinct types of complement constructions in Skou, as far as they can be morphosyntactically defined (for some apparent constructions, not enough information is available to permit a definitive classification). There are significant numbers of similarities between the different complement types, and these traits will be examined first. In the interests of a complete discussion of each complement type each different complement type will be presented separately following this general introduction.

\subsection*{15.1 General characteristics of complement clauses}

Complement constructions in Skou generally exhibit raising, but of a more extreme nature than has generally been reported in most languages.

In addition to control of the sort seen in (3), we also find sentences that would translate literally as (4), with the same intended reading as (3). In (4) it is the object of the complement clause, and not the subject, that shows control from the main clause.
(3) I saw her \({ }_{j}\left[\emptyset_{j}\right.\) kiss him \(\left.{ }_{k}\right]\).
(4) I saw him \({ }_{k}\left[\right.\) she \(\left._{\mathrm{j}} \mathrm{kiss}(\mathrm{ed}) \emptyset_{\mathrm{k}}\right]\).
'I saw her kiss him.'
I want, hope, think, believe (that) she has eaten;
I told, persuaded, asked, made her eat
EP and complements

\subsection*{15.2 Psych-complements}

A range of psychological predicates take sentential complements in Skou, and a representative sample of these are presented below, with a discussion of their individual peculiarities. The predicates that we will discuss are:
```

péng 'forget'
pung li 'want'

```

\subsection*{15.2.1 Forget}

The invariant verb péng 'forget' can take either a nominal or complement clause serving as the object. The syntax of the 'forget' construction is somewhat different to other complements in that the complement clause can appear either preverbally or postverbally. An example of a nominal object is shown in (99), where fóefòe 'soap' completely satisfies the argument frame of the verb.
\begin{tabular}{lll}
\(N i ̀=\) péng \(_{\mathrm{L}}\) & fóefòe & nì=k-á loe. \\
\(1 \mathrm{SG}=\) forget & soap & \(1 \mathrm{SG}=1 \mathrm{SG}\)-carry
\end{tabular}
'I forgot to bring soap.'
When used with a phrasal object the complement phrase must occur preverbally, and there is a requirement that the subject of the complement clause must be coreferential with the subject
of the main clause. Grammatical examples of the use of péng with clausal complements are shown in the following sentences.
\[
\begin{array}{llll}
\text { Nì=re-re } & \text { Pa ílong } & \text { li=ko } & \text { nì= péng. } \\
\text { 1SG=go-RED } & \text { Tami River } & \text { do=OBV } & \text { 1SG=forget } \\
\text { 'I forgot to go to the Tami river.' } & \tag{99}
\end{array}
\]
\begin{tabular}{lll} 
* nì=peng & fóefòe \(\quad\) mè=m-á & p-oe \\
1SG=forget & soap \(2 S G=2 S G-c a r r y ~\) & 2SG-come \\
'I forgot that you brought soap' &
\end{tabular}

Nì=re pa hí-hí \(\quad \mathrm{l}=\) =pa, fóefòe nì=péng.
\(1 \mathrm{SG}=\) go water wash-RED do=INSTR soap \(1 \mathrm{SG}=\) forget
'I went to wash, but I forgot the soap.'

\section*{xxxxxxxx}

\subsection*{15.2.2 Wanting}

There are several ways to express the notion of 'wanting' and 'liking' in Skou. The simplest involves nothing more than marking an unrealised aspect on the predicate, as in (99).
\[
\begin{array}{lll}
\text { Hòe } & \text { nì }=k \text {-ang-kang } & \text { li }  \tag{99}\\
\text { sago } & \text { 1SG=1SG-eat-RED } & \text { do } \\
\text { 'I want to eat sago.' } &
\end{array}
\]

In addition to this, it is possible to mark 'want' with a complex predicate. When the main predicate is 'want' or 'like', and the object is a nominal, not a sentential complement, then the adjunct nominal (+ do) expression pung li 'do liver' is used as a transitive verb, as in the following sentence (This is one of the set of adjunct nominal + verb collocations that takes the proclitic external to the adjunct nominal - see 14.5.1).
\[
\begin{array}{ll}
\mathrm{Pe}=\text { angue=ing a } & \text { nì=pung li. }  \tag{99}\\
\text { 3SG. } \mathrm{F}=\text { unmarried.girl=the } & \text { 1SG=liver do } \\
\text { 'I like that girl.' }
\end{array}
\]

When the object of 'want' is a verbal complement, the same structure may be used, except that pung li may occur either preceding or following the wanted event; a nominal object must precede the predicate: *ni pung li pe angue ing a. The verb in the complement clause must appear reduplicated, indicating its irrealis mood.
\begin{tabular}{|c|c|c|}
\hline Hòe & nì=k-ang-kang & nì=pung \\
\hline sago & 1SG=1SG-eat-RED & \(1 \mathrm{SG}=\) liver \\
\hline \multicolumn{3}{|l|}{'I want to eat (some) sago.} \\
\hline
\end{tabular}

Nì=pung li hòe nì=k-ang-kang.
\(1 \mathrm{SG}=\) liver do sago \(1 \mathrm{SG}=1 \mathrm{SG}\)-eat-RED
'I want to eat (some) sago.'
It is also grammatical for a sentential complement to follow pung li, and for pung li to appear without any agreement, if the subjects of the two predicates are coreferential. Notice, however, that in the latter case the subordinate clause is marked with li as well as reduplication, indicating an aspectual change.
(99) Pung li ìngno nì=k-ang-kang li.
liver do banana 1SG=1SG-eat-RED do
'I would like to eat (some) bananas.'
(99) * pung li ìngno nì kang kang

The same construction may be used when the subject of the wanting clause and the subject of the subordinate clause are not coreferential:
\(N i=p u n g\) li hòe mè=m-ang-mang.
\(1 \mathrm{SG}=\) liver do sago \(2 \mathrm{SG}=2 \mathrm{SG}\)-eat-RED
'I want you to eat (some) sago.'
\(N i ̀=\) pung li pe mè=p-áng-páng.
1SG=liver do 3SG.F 2SG=2SG-hit.F-RED
'I want you to hit her.'
(99) Nì=pung li nì pe=w-á-wá.

1SG=liver do 1SG 3SG.F=3SG.F-hit-RED
'I want her to hit me.'
In this last sentence the object nì, even though it is coreferential with the subject of pung li'want', cannot be omitted, nor may the subject marking on pung li. Omission is only possible if the two subjects are coreferential.
(99) * nì pung li pe wá wá
(99) * pung li nì pe wá wá

This last ungrammatical sentence cannot be interpreted as 'She wants to hit me.' since the form of the verb 'do' is not suitable for marking a 3SG.F subject. Grammatical versions of this sentence are shown in (99) - (99).

Pe=pung tue nì pe=w-á-wá.
1SG=liver 3SG.F.do 1SG 3SG.F=3SG.F-hit-RED
'She wants to hit me.'
(99) Pung tue nì pe wá wá

The monoclausality of this construction can be seen in the fact that topicalisation applies around pung Ii: elements of the sentence that follow pung li can be topicalised to a position preceding it.
\begin{tabular}{llll}
\begin{tabular}{ll} 
Ìngno=ing, \\
bananas=DEIC & nì=k-ang-kang
\end{tabular} & 1SG=1SG-eat-RED & pung & liver \\
livò & do=EMPH
\end{tabular}
'Bananas, I really like eating (them).'
(99) İngno=ing, nì=pung \(\mathrm{li}=\) wò nì=k-ang-kang.
bananas=DEIC \(1 \mathrm{SG}=\) liver do=EMPH \(1 \mathrm{SG}=1 \mathrm{SG}\)-eat-RED
'Bananas, I really like eating (them).'
In addition to the pung li construction, wanting is perhaps more commonly expressed simply by reduplicating the verb and adding the auxiliary verb 'do', as in the following example.
(99) Mè ya yatà mè=pi-pi pi?

2SG what transact 2 SG=2SG.do-RED 2SG.do
'What do you want to buy?'

Other examples of this aspectual combination with a 'wanting' interpretation have been seen in 7.9 .

\subsection*{15.3 Manner complements}

\subsection*{15.3.1 Trick, fool}

XXXXX
There is an interesting complex verbal collocation involving the verbs li 'do' and lu 'fool' that is used to express the notion of tricking someone. An example of this is shown in (99).
(99) Nì pe=tuer-u nì=re-re

1SG 3SG.F=3SG.F.do 3SG.F-deceive 1SG=go-RED
pá-pè=pe.
house-3SG.F.GEN=3SG.F.DAT
'She tricked me into going to her house.'
While accepted by speakers, this predicate is only used very rarely, so little can be said of its morphosyntactic restrictions.

\subsection*{15.3.2 purpose}

A purposive complement may be constructed by putting the complement clause following the main verb. The verb in the complement clause does not normally take proclitic agreement, and is in reduplicated form with the verb 'do' following, as would be expected of an intended but unrealised action (see 7.9).

(99) Pe=te tí hí-hí tue.

3SG.F=3SG.F.go sea wash-RED 3SG.F.do
'She went to the sea to wash.'
XXXXXXXXX

\subsection*{15.3.2 Hesitation}

The notion of 'hesitate' is expressed in Skou with a predicate rówó i li, a verbal predicate that is unusual for not taking any agreement clitics for subject. The explanation for this appears to be that rówó is treated as the (feminine) inanimate subject of the clause marking hesitation, and the clause expressing the source of the hesitation is taken as a complement clause. The entire structure is thus more similar to complements in English like 'It's crazy that you should go.' than 'You hesitated to go.'

In the following example we can see that the clause nì re re Pa ílong li 'I want to go to the Tami river.' is the complement of the predicate headed by the impersonal verb rówó, which
inflects only on the verbs \(i\) 'be' and li 'do', not by proclitic (since it is inanimate - see xx.xx) but by means of the changes in the verb stems. The complement clause precedes the rówó predicate, and is joined by means of the proximate marker \(=\mathrm{pa}\), indicating a same reference condition between the two clauses. Since verbal inflection tells us that the morphological subject is not the same between the two clauses, we must be dealing with either something similar to the treatment of unaccusatives (19.5.2), or else, since rówó can only possibly be used to imply that someone is hesitating in their own actions, the =pa is used to indicate the same temporal setting.
(99) Nì=re-re Paílong li=pa rówó e tue.

1SG=go-RED Tami River do=INSTR hesitate 3SG.F.be 3SG.F.do
'I'm hesitant about going to the Tami river.'
(99) Í bápáli nì=fue=ko nòe rówó.
snake big \(1 \mathrm{SG}=\mathrm{see}=\mathrm{OBV}\) body hesitate
'When I see big snakes I get shivers.'

\section*{XXXXXXX}

\subsection*{15.4 Knowing and perceiving}

The complements of these predicates appear with the same restrictions as are found with perception verbs. This is perhaps not surprising, since these predicates are lexically coded with the same verbs, fue and lue, that are used as perception verbs: the syntax is invariant regardless of the sense of the verb that is intended. The lexical differentiation of the verbs can be seen by the fact that lúe and fue, when used with the sense 'know', do not carrythe implication that the knowledge was acquired through hearing or seeing, respectively, but are simply generic predicates marking knowledge acquisition.
\[
\begin{array}{lll}
\text { Nì=lúe=ko } & \text { mè=ong fa. }  \tag{99}\\
\text { SGG=hear=OBV } & \text { 2SG=deceive } \\
\text { 'I } \\
\text { 'I know that you're fooling (me).' }
\end{array}
\]
\[
\begin{align*}
& \text { Nì=lúe=te mè=ong fa. }  \tag{99}\\
& \text { 1SG=hear=DIR } \quad 2 \mathrm{SG}=\text { deceive } \text { use } \\
& \text { 'I know that you're fooling (me).' }
\end{align*}
\]

\section*{xxxxxxx}

\subsection*{15.4.1 Perception complements}

Perception complements alllow for one of the arguments of the complement clause to be realised as the object of the main clause. Unusually, the argument that can display 'raising' of this sort is not restricted to be the subject of the subordinate clause. We can show that the phenomenon here is not simply topicalisation or some other form of pre-sentential positioning by examining the forms of object agreement on the matrix verb. An example of a sentence with no raising and a complement of a perception verb can be seen in (99). Here the verb is in the form showing no agreement for the object in terms of features, and the complement clause appears in the same form that it would in a 'normal' main clause.
\begin{tabular}{|c|c|c|c|c|}
\hline Nì=fue & [IP naké & ke & kóeng & ar. \\
\hline \(1 \mathrm{SG}=\) see & dog & 3SG.NF & tooth & 3SG.NF \\
\hline 'I saw & og bite h & & & \\
\hline
\end{tabular}

When the subject of the embedded clause is raised to serve as the object the alternative seen in (99) appears. Clearly the main clause now has an overt object, preverbal to the predicate fue.
\begin{tabular}{|c|c|c|}
\hline Naké & nì=fue [IP ke & kóeng \\
\hline dog & \(1 \mathrm{SG}=\) see \(\quad 3 \mathrm{SG} . \mathrm{NF}\) & tooth 3SG.NF=hit \\
\hline 'I saw & the dog bite him.' & \\
\hline
\end{tabular}

If the dog in question (and in object position in the main clause) is feminine, then the feminine form of the verb must be used, not only in the embedded clause, but also in the main clause:
\begin{tabular}{lllll} 
Naké & nì=fu & [IP ke & kóeng & pe=w-á ]. \\
dog & 1SG=see.F & 3SG.NF \\
tooth & 3SG.F=3SG.F-hit
\end{tabular}

If the nominal is not overtly raised, then the verb may not show agreement with it, proving that the optional preverbal position does mark some real change in grammatical status. In (99) we see that the dog in the complement clause must be interpreted as female, because of the use of feminine agreement marking on the verb of that clause. Nonetheless it is not grammatical for the main clause verb to exhibit feminine agreement for that argument; only the neutral form of the verb is possible, as in (99).
\[
\begin{align*}
& \text { * nì=fu [iP naké ke kóeng pe=w-á ] }  \tag{99}\\
& \text { 1SG=see.F dog 3SG.NF tooth 3SG.F=3SG.F-hit } \\
& \text { 'I saw the dog bite him.' } \\
& \begin{array}{l}
\begin{array}{l}
\text { nì=fue } \\
\text { 1SG=see }
\end{array}
\end{array} \begin{array}{clll}
{[\text { IIP }} \\
\text { naké } \\
\text { dog }
\end{array} \quad \begin{array}{l}
\text { ke } \\
\text { 3SG.NF }
\end{array} \quad \begin{array}{l}
\text { kóeng } \\
\text { tooth }
\end{array} \quad \begin{array}{l}
\text { pe=w-á }] \\
\text { 3SG.F=3SG.F-hit }
\end{array} \tag{99}
\end{align*}
\]

Additionally, not only the subject, but also the object of the subordinate clause may appear in a raised position. Since the object in this example is non-feminine, that means that the verb cannot be in the feminine form, regardless of the sex of the dog.
\[
\begin{align*}
& \text { Ke } \quad \begin{array}{l}
\text { nì=fue }
\end{array} \quad \text { [IP naké }  \tag{99}\\
& \text { 3SG.NF } \begin{array}{l}
\text { kóeng }
\end{array} \text { pe=w-á ]. } \\
& \text { 'ISG=see } \begin{array}{l}
\text { IS } \\
\text { dow the dog bite him.' }
\end{array}
\end{align*}
\]
\[
\begin{array}{llll}
\text { * ke } & \text { nì=fu [iP naké } & \text { kóeng } & \text { pe=wá ] }  \tag{99}\\
\text { 3SG.NF } & \text { 1SG=see } & \text { dog } & \text { tooth }
\end{array} \text { 3SG.F=3SG.F-hit }
\]

The fact that both the subject and the object of the complement can appear raised to the position and status of object of the main clause (though not simultaneiously) means that raising is not a test for subjecthood in Skou, but rather a test for core status - a test for a nominal being either subject or object. It does not apply to oblique arguments, including unmarked postverbal participants, as can be seen in the ungrammaticality of (99)"; proof that the raising may apply to monovalent verbs can be seen in the grammaticality of the sentence in which the subject of re, nì 'I', appears as the object of lóeng, this is shown in (99)'.

(99)' Nì pe rúng ko [ip nì re mè ].
(99)" * mè pe rúng ko [IP nì re (mè) ]

If the verb is eligible to show agreement with some features of the object through vowel shift, this is also found, where it is not found if there is no overt object in the main clause. Compare, for instance, the following sentence, with no object marking on the verb and no overt object in the main clause
\[
\begin{array}{ll}
\text { Ke=lóeng=ko } \quad \text { nì } & \text { pe= } \mathrm{fí} .  \tag{99}\\
\text { 3SG. } \mathrm{NF}=\text { tell=OBV } & 1 \text { SG } \\
\text { 'He told her to meet me.' }
\end{array}
\]
with a version that has the feminine subject of the complement clause treated as the object of the main clause, this status shown by position of the pronoun and the vowel changes on the verb, which mark feminine gender:
\begin{tabular}{llll} 
Pe & ke=lúng=ko & nì & pe=fí. \\
3SG. & 3SG.NF=tell.F=OBV & 1SG & 3SG.F=meet
\end{tabular}
'He told her to meet me.'
It is quite clear that in (99) the object of the clause headed by lóeng is feminine, while in (99) the clause has a phrasal complement, nì pe=fí. This optionality is typical: for any predicate in the complement, the construction may, but does not have to, display raising behaviour.

While there is always variation between the raising and non-raising versions of the same complement construction, there are some semantic correlates associated with the raising/nonraising difference, for some predicates.

XXXXX
contrasting raising complements with non-raising complements

\subsection*{15.4.1.1 Perception predicates and small clauses}

\section*{XXXXXXXXXXXXXXXXX}

In the following sentences the verb of the main clause is marked for feminine gender, shown by the vowel alternation (see xx.xx), even though there is not an overt object, pronominal or otherwise, anywhere in the main clause. The only possible interpretation of this gender marking on the verb is that is cross-references the noun ró 'cloth, skin, bark', a feminine noun. We can, thus, see features of elements of the subordinate clauses percolating upwards to be realised in the agreement morphology found in the main clause, exhibiting a kind of long-distance agreement.
\begin{tabular}{ll}
{\(\left[\operatorname{RESULT}\left[\begin{array}{ll}\text { RPó-pè=pe } \\
\text { clothes-3SG.F.GEN=3SG.F.DAT }\end{array}\right.\right.\)} & ùepi \\
dry
\end{tabular} \begin{tabular}{l} 
nì=fu. \\
1SG-see.F
\end{tabular} 'I saw that her clothes were dry.'


Compare this with the segmentally identical, but prosodically differentiated (by intonation) sentence below, in which ùepi is a modifier inside the same NP as ró pè pe. Here the marking of feminine gender on the verb of the main clause is unsurprising, since it is the object of the verb that is feminine gender.
\[
\begin{array}{lll}
{\left[\begin{array}{ll}
\text { [nP Ró-pè=pe } \\
\text { clothes-3SG.F. GEN=3SG.F.DAT }
\end{array}\right.} & \begin{array}{l}
\text { ùepi ] } \\
\text { dry }
\end{array} & \begin{array}{l}
\text { nì=fu. } \\
\text { 'I saw her dry clothes.' }
\end{array} \tag{99}
\end{array}
\]

Note that there is no real ambiguity between the two readings offered above in (99) and (99) for Ró pè pe ùepi nì fu. In speech (the only medium in which Skou is commonly communicated) the intonation that expresses uepi as an NP-internal modifier has the intonation pattern as shown in (99)', while a sentence with ùepi as a result has that shown in (99)'. With the resultative clause there is a fresh start to the intonational tonespace, signifying the clausal boundaries. This is not found with an NP-internal attributive use.
ùepi as NP-internal modifier
[-\ - \ - - - ]
ùepi as NP-external resultative predicate
(99)' [ - \ - \ - \ _ ]

In the following paraphrase the demonstrative clitic =ing follows the string Ró pè pe ùepi, which could be interpreted as a unit meaning either 'her dry clothes', interpreted as a single NP with the adjective modifying the head, or 'Her clothes are dry.', being an entire self-contained clause with a simple noun predicated by the adjective. For both interpretations the placement of the deictic shows that this unit functions as a single NP in the main clause, and not as a subordinate or complement clause.
\[
\begin{array}{ll}
\begin{array}{l}
\text { [NP Ró-pè= pe } \\
\text { clothes-3SG.F. GEN=3SG.F.DAT }
\end{array} & \begin{array}{l}
\text { ùepi=ing] } \\
\text { dry= ì̀=fu. }
\end{array}  \tag{99}\\
\text { 'I saw her dry clothes.' }
\end{array} \quad \text { 1SG-see.F }
\]

The next example shows the postverbal small clause, which in this case serves to predicate an inherent characteristic of the adjunct nominal, being marked following the verb.
\begin{tabular}{lll}
\(\mathrm{Pe}=\) ueme \(\quad\) ku \(\quad\) pe=tue & balèng. \\
3SG.F=woman child 3SG.F=3SG.F.do & male \\
'My wife gave birth to a boy.' &
\end{tabular}

When the small clause refers to an adjunct nominal, and not a subject or object argument of the clause, the otherwise present option of coding the adjective in an NP-internal position modifying the noun is not grammatical. With the adjunct nominal construction only a bare noun may appear as the semantic specifier of the verb, and any modification of that noun in an immediate constituent with it is disallowed, as shown in the following example in which balèng 'male' appears as a modifier of ku directly, and so is ungrammatical.
(99) * pe ueme ku balèng pe tue

Even with a full NP
xxxxxx
here i am
Postverbal modification of a preverbal nominal has precedents in other parts of the grammar, as can be seen in (99), where the postverbal adjective atáléle 'small' modifies the preverbal object móe 'fish'.
```

(99) Móe nì=láng=ko atáléle(-fa).
fish $1 \mathrm{SG}=$ chop. $\mathrm{F}=\mathrm{OBV}$ small-'ADJ’
'I chopped the fish up into small pieces.'

```

XXXXXXXXXX
(99) \(\mathrm{Ni}=k-a n g=k 0 \quad\) yong atáléle.
\(1 \mathrm{SG}=1 \mathrm{SG}-\mathrm{eat}=\mathrm{OBV}\) food small
'I only eat a little.'
(literally, 'I eat such that the food is little.')
(reference to adverbs in 5.6)
XXXXXXX

\subsection*{15.5 Manipulative complements}

Manipulative complements are those structures that express causation in some way, and in which the subject of the main clause brings about, or initiates, the predicate described in the lower clause by a different subject.

The most common of these involves speech-act verbs, used when one participant instructs another to carry out an action, and these typically involve the generic speech act verb lóeng 'tell, say, command'.

\subsection*{15.5.1 Tell}

Complements with the verb lóeng 'say, tell' show a similar range of possibilities, in terms of syntactic behaviour, to that found with complements of perception, though the differences are important.

\section*{XXXXXXXX}

Particularly, 'raising to object' is possible only with the subject of the complement clause, though it is not necessary. The raising to object of the object of the complement clause that is such a feature of Skou perception complements is not possible with complements involving lóeng. For instance, given the following sentence:
\[
\begin{array}{llll}
\text { Ke=lóeng=ko } & \text { nì } & \text { pa } & \text { nì=ké. }  \tag{99}\\
\text { 3SG.NF=say=OBV } & \text { 1SG water } & 1 \mathrm{SG}=\text { get } \\
\text { 'He told me to fetch some water.' }
\end{array}
\]
only one variant with a raised object, (99), is possible. raising the original object, pa 'water', is not possible, as seen in the ungrammaticality of (99).

'He told me to fetch some water.'
(99) * pa ke lóeng ko nì nì ké

A variable that is not found with perception-verb complements is that it is possible for the subject of lóeng to be the same as the subject of the complement: in this case the main verb has the sense 'promise, assure', and is syntactically constrained to not allow any raising to object.

\(1 \mathrm{SG}=\) say pandanus \(1 \mathrm{SG}=\mathrm{PROM}=\) get.PL come
'I promise that I'll get the pandanus fruits.'
\begin{tabular}{|c|c|c|c|c|}
\hline K e=lóeng \(=\) ko & nì=re & rabáká yatà & & nì \(=1 \mathrm{i}\). \\
\hline \(3 \mathrm{SG} . \mathrm{NF}=\mathrm{say}=\mathrm{OBV}\) & \(1 \mathrm{SG}=\mathrm{go}\) & cigarette & transact & \(1 \mathrm{SG}=\mathrm{do}\) \\
\hline 'He told me to go a & buy so & garettes.' & & \\
\hline
\end{tabular}
(99) K e=lóeng=ko nì=re rabáká yatà nì=li.

3SG.NF=3SG.NF-say=OBV 1SG=go cigarette transact 1SG=do
'He told me to go and buy some cigarettes.'
Saying complements allow for a doubling of a pronominal object in the base clause, so that a representation of the argument appears in the matrix clause as well as in the subordinate clause. Compare the following two sentences:
(99) M è nì mè=p-óeng=ko pa nì=ke.
\(2 \mathrm{SG} \quad 1 \mathrm{SG} \quad 2 \mathrm{SG}=2 \mathrm{SG}\)-tell=OBV water \(1 \mathrm{SG}=\) get
'You told me to fetch some water.'
\[
\begin{align*}
& \mathrm{Ni}=l o ́ e n g=k o \quad \text { mè̀ } \quad \text { pa } \quad \text { mè= }=\text { b-é. }  \tag{99}\\
& 1 \mathrm{SG} \text {-tell=OBV } 2 \mathrm{SG} \text { water } 2 \mathrm{SG}=2 \mathrm{SG} \text {-get } \\
& \text { 'I told you to fetch some water.' }
\end{align*}
\]

The object of the main verb may be realised in either the main clause as P or in the complement clause as S/A; the marking on the verb is unchanged.
\[
\begin{array}{llll}
\text { [main Nì=lóeng=ko ] } & \text { [comp ke=angku=we } & \text { pa } & \text { ke=ké ]. }  \tag{99}\\
\text { 1SG-tell=OBV } & & \text { 3SG.NF=child=this } & \text { water } \\
\text { 3SG.NF=get }
\end{array}
\]
'I told the boy to fetch some water.'
\[
\begin{align*}
& \text { [main Nì ke=angku=we nì=lóeng=ko ] [comp pa ke=ké ]. }  \tag{99}\\
& \text { 1SG 3SG.NF=child=this 1SG-tell=OBV water 3SG.NF=get } \\
& \text { 'I told the boy to fetch some water.' }
\end{align*}
\]
\[
\begin{align*}
& \text { [main Nì=lóeng][comphiòe nì=a=loe-loe ]. }  \tag{99}\\
& 1 \mathrm{SG}=\text { tell pandanus } 1 \mathrm{SG}=\mathrm{PROM}=\text { get.PL-RED } \\
& \text { 'I promise I'll bring the pandanus fruit.' }
\end{align*}
\]

It is not possible for a nominal object to appear as the P of the matrix clause:
(99) Theo ke ke=lóeng=ko Petrus pe ke=láng.

Theo 3SG.NF 3SG.NF=say=OBV Petrus 3SG.F 3SG.NF=hit.F
'Theo told Petrus to hit her.'
(99) * Theo Petrus ke lóeng ko (ke) pe ke láng

Many languages have no overt means, other than intonation, of encoding these control concepts; often markers of these discourse relationships are the first things borrowed from another language that does have them, when two languages come into contact, indicating a perceived lack of these markers, as well as an actual one. Other languages (especially verb-final ones) have explicit verbal morphology to signal these relations, and do not use separate words at all.
(99)

Ke=lóeng=ko mè=me ya mè=pi?
3SG.NF=tell=OBV \(2 \mathrm{SG}=2 \mathrm{SG} . \mathrm{go}\) what \(2 \mathrm{SG}=2 \mathrm{SG}\). do
'What did he tell you to go and do?'

\subsection*{15.5.1.1 Speech act complements and 'raising'}

These complements show an unusual pattern of 'raising', in that either the subject or the object may raise. While the following sentence, with the complement intact and the main verb lóeng 'tell' appearing without any apparent object is both usual and acceptable in Skou:
\begin{tabular}{|c|c|c|}
\hline \(\mathrm{Pe}=\mathrm{r}\)-úng=ko & mè & nìfí. \\
\hline 3SG.F=3SG.F-tell.F=OBV & 2 SG & \(1 \mathrm{SG}=\) meet \\
\hline 'She told me to meet & & \\
\hline
\end{tabular}
it is also possible to have, as in English, the subject of the complement function as the object of the main verb, as determined by position. In (99) there is now a preverbal object for lóeng, coreferent with the subject of the complement clause.
(99) Nì pe=r-úng=ko mè nì=fí.

1SG 3SG.F=3SG.F-tell.F=OBV 2SG \(1 \mathrm{SG}=\) meet
'She told me to meet you.'
A third possibility, for which there is no syntactic equivalent in English, is for the object of the complement to appear as object of the main clause. In this case the subject of the complement cannot be coded as the object of the main clause, and may only appear in the complement.
\begin{tabular}{llll} 
Mè & pe=r-úng=ko & (mè) & \(n i ̀=f i ́\). \\
2SG & 3SG.F=3SG.F-tell.F=OBV & \(2 S G\) & \(1 S G=m e e t\)
\end{tabular}
'She told me to meet you.'
(Glossing literally, 'She told you (that) I will meet (you).', though this glossing does not reflect the meaning of the sentence at all)

Nominal arguments show the same behaviour as the pronominal ones shown above. In the examples below (99) shows the sentence without any raising, and (99) shows the NP ke angku pè pe raised to be the object of the matrix clause.
\begin{tabular}{lll} 
Pe=r-úng=ko & ke=angku-pè=pe & mè \\
3SG.F=3SG.F-tell.F=OBV & 3SG.NF=child-3SG.F. GEN-3SG.F.DAT & 2SG \\
ke=fí. & & \\
3SG.NF=meet & & \\
'She told her son to meet you.' &
\end{tabular}
\begin{tabular}{ll} 
Ke=angku-pè=pe & pe=r-úng=ko \\
3SG. \(\mathrm{NF}=\) child-3SG.F.GEN-3SG.F.DAT & 3SG.F=3SG.F-tell.F=OBV \\
ke=fí. & \\
3SG. & \\
'SF=meet & \\
'She told her son to meet you.' &
\end{tabular}

\section*{XXXXXXXXXXXXXX}

Note that unlike perception complements the P of the subordinate clause may not be raised to be the P of the main clause. This is shown in the ungrammaticality of the following sentence (compare with (99) and (99) above).

> * Theo pe ke=lóeng=ko Petrus (pe) ke=láng. Theo 3sG.F 3SG.NF=say=OBV Petrus 3SG.F 3SG.NF=hit.F 'Theo told Petrus to hit her.'

\section*{xxxxxxyxx}

\section*{15．5．2 Teach}

The concept of teaching is expressed with the complex predicate na lùng and another raising construction．Examine the following sentence：
\begin{tabular}{lllll} 
Nì & pe＝angku & hòe nì＝na lùng & pe＝tue \\
1SG & 3SG．F＝child & sago & 1SG＝teach & 3SG．F＝3SG．F．do \\
e tue． & & \\
3SG．F．be 3SG．F．do \\
＇I taught the girl to stir sago．＇
\end{tabular}

In this sentence it appears that the clause＇the girl stirs sago＇is broken up，as shown in the following diagram．The two clauses，Pe angku hòe pe tue e tue and Nì pe angku nì na lùng，do not form discrete units，but are broken up in the sentence，each appearing discontinuously．


A better analysis is to think of this sentence as involving a main clause，Nì pe angku nì na lùng＇I taught the girl＇，and a subordinate clause pe angku hòe pe tue＇The girl stirs sago．＇，with pe angku being marked only as the object of the main－clause object，and hòe appearing in the main clause as a raised argument from the subordinate clause．This is shown in（99）．
（99）［ Nì pe angku［ ］nì na lùng ］
[ Pe angku hòe pe tue ]

The difference，then，between the raising constructions seen with perception predicates and ＇normal＇complements of saying，and complements involving na lùng，is that na lùng allows for an object to start with，and then additionally allows for a raised object，while the＇normal＇ saying complements simply allow for a raised object．The subcategorisation frames would be something like the following：
（99）‘lóeng：〈＿＿（NP：SUBJ），（XCOMP）〉’
（99）＇＇na lùng：〈＿（NP：SuBJ），＿（NP：OBJ），（XCOMP）〉＇
The raising－to－object option would be specified as a possibilities of the whole macro－class of complement－taking verbs，and so not part of each individual subcategorisation frame．

This type of complements found with na lùng can be paraphrased with no discontinuities in the subordinate clause，the complement clause following the main verb as in（99），or with the entire subordinate clause intact preceding the verb，as in（99）＇：
(99) Nì nì na lùng pe angku hòe pe tue e tue.
(99)' Nì pe angku hòe pe tue e tue nì na lùng.

Notice especially that the appearance of both pe angku and hòe as objects in the main clause cannot be taken as simply an exuberant instance of object raising from the subordinate clause, as we can see that there are two NPs, neither embedded in the other, in the preverbal position, representing both the subject and the object of the subordinate clause. While it is true that both subjects and objects are eligible for raising in complementation constructions in Skou, there are no reasons to think that two NPs may be raised, since no other verbs show this possibility. The fact that na lùng shows some trivalent behaviour is further evidence that one of the NPs, the instructee, is specified as part of the main clause without us needing to invoke raising principles.
other possible analyses of this construction, with no raising involved,

xxxx
xxxxxxxx

\subsection*{15.5.3 Get}

It is possible to use ké 'get' as a general manipulation complement, as in (99).
(99) Nì ke=ké [pa nì=ké k-a loe]. \(1 \mathrm{SG} 3 \mathrm{SG} . \mathrm{NF}=\) get water \(1 \mathrm{SG}=\) get 1 SG -carry come
'He got me to fetch water.'
Sentences (99) - (99) shows that reflexives are not bound to the clause in which they occur. In (99) we have a complement clause in which there is a reflexive beneficiary which xxxxx
(99)
\begin{tabular}{|c|c|c|c|}
\hline Áì-nı̀=ne & ke & ke=angku & ke=ké \\
\hline father-1SG=1SG & 3SG.NF.ERG & 3SG.NF=child & 3SG.NF=get \\
\hline [compke & ke=ti & tína & yatà ke=li ]. \\
\hline 3SG.NF & \(3 \mathrm{SG} . \mathrm{NF}=3 \mathrm{SG}\) & NF.go salt & transact 3SG.NF=do \\
\hline y father \({ }_{1}\) mader & the boy \({ }_{j}\) go & buy some salt & for himself \({ }_{\text {i }}\). \\
\hline
\end{tabular}
(99)
\begin{tabular}{|c|c|c|c|c|}
\hline Áì-n & ke & [COMP & ke=angku & ke= \\
\hline father-1SG=1SG & 3SG.NF.ERG & & 3SG.NF=child & 3SG.NF=3SG.NF.go \\
\hline tína yatà & \(\mathrm{ke}=1 \mathrm{l}]\) & \(\mathrm{ke}=\mathrm{ke}\) & nòe-k & \\
\hline salt transact & 3SG.NF=do & 3SG.N & F=get body-3 & SG.NF3SG.NF.DAT \\
\hline \({ }^{\prime}\) My father \({ }_{\text {i }} \mathrm{m}\) & he boy \({ }_{j}\) go & buy & e salt for him & self \({ }_{\text {i }}\). \\
\hline
\end{tabular}

XXXXXXX

\subsection*{15.5.4 The status of recipient nominals in bivalent predicates: testing with raising}

In 5.4.4 we introduced the sole trivalent predicate in the language, and the tests that provide conflicting identities for the grammatical function status of the recipient. As a means of testing the status of recipients as core or oblique arguments, it is highly significant that the postverbal recipient in a verb of transfer is eligible for raising. This test shows that, despite the position of the recipient following the verb, a position normally limited to oblique NPs, the recipient is
treated as a non-oblique, and that rather than, say, simply targetting a particular position in the clause (preverbal bare NP), the restrictions on raising are more complex, and can only be described by reference to grammatical functions. In addition to a complex sentence containing a complement-taking verb and a subordinate clause headed by a bivalent verb in which there is no raised argument, shown in (99), we can also see a range of alternatives with various of the core arguments of the subordinate clause appearing as objects of the complement-taking verb. The possibilities for raising are shown in the following three sentences, showing raised subject in (99)', a raised theme in (99)", and a raised recipient in (99)"'. The fact that this last sentence is also grammatical points to the core status of the recipient in the subordinate clause.

Basic sentence


Subject of embedded clause treated as object of main clause
(99)' \(\boldsymbol{P e}\) ke lóeng ko [ip kóe pe wé rung nì ].

Theme object of embedded clause treated as object of main clause
(99)" Kóe ke lóeng ko [ip pe wé rung nì ].

Recipient object of embedded clause treated as object of main clause
(99)"' Nì ke lóeng ko [ip kóe pe wé rung ].

These data should be compared to the following set of sentences, which are parallel in structure to those seen in (99) - (99)"' except for the fact that they use the predicate yatà li 'sell, buy'. With this verb the postverbal goal is not a core argument, even though it appears in the same place as the recipient in (99) - (99)"', and may not be raised, showing that it is not a core argument of the subordinate clause.
\begin{tabular}{|c|c|c|c|c|}
\hline & p kóe & & tà & \(\mathrm{pe}=\) \\
\hline \(3 \mathrm{SG} . \mathrm{NF}=\) tell=OB & sago.cake & 3SG & trans & 3S \\
\hline
\end{tabular}
'He told her to sell the sago cake to me.'
Subject of embedded clause treated as object of main clause
(99)' \(\boldsymbol{P e} \boldsymbol{e}\) ke lóeng ko [ip kóe pe wé yatà pe tue nì ].

Theme object of embedded clause treated as object of main clause
(99)" Kóe ke lóeng ko [ip pe wé yatà pe tue nì ].

Recipient object of embedded clause treated as object of main clause: ungrammatical
(99)"'* nì ke lóeng ko [IP kóe pe wé yatà pe tue ].

The failure of nì to grammatically appear as the object of lóeng in (99)"' shows that it does not share the behavioural characteristics that the other two nominal arguments in that complex clause, pe and kóe, display (in common with the core arguments of other verbs). We can only conclude that it is an oblique argument.

\subsection*{15.5.5 Raising and adjunct nominals}

When the complement clause involves an adjunct nominal, the adjunct nominal does not display any raising phenomena; this might simply reflect the fact that adjunct nominals are not animate,
and so cannot be commanded, a property we would expect of the object of acomplement-taking verb, or it might reflect an important different between adjunct nominals (and obliques) on the one hand, and core arguments on the other. More interesting, however, is the fact that the object may not be raised in the presence of an adjunct nominal. The sentence below shows a complement clause with an adjunct nominal pìng.

Pe=r-úng=ko te pìng nì=lú.
3SG.F=3SG.F-tell.F=OBV 3PL bow 1SG=release
'She told me to shoot them.'
As predicted, the subject of the complement clause may appear marked (by position) as the object of the matrix verb, as in (99)', below:
\((99)\) ' Nì pe rúng ko te pìng nì lú.
The adjunct nominal from the complement clause may not, however, appear as an object of the main clause, shown by the ungrammaticality of (99), and neither may the object of the complement clause, shown in (99)'.
(99) * pìng pe rúng ko te (pìng) nì lú
(99)' * te pe rúng ko (te) pìng nì lú

Compare this with a set of sentences using the simple predicate ká 'hit', in which the object of ká can show raising.

XXXXXXXX

\subsection*{15.5.6 Complements, negation, recipient}

A variety of speech-act or psych complements are expressed simply by placing the matrix verb in a clause preceding the complement clause.
\begin{tabular}{llll} 
Nì=lúe & ka & bòeng=ing & pe=tue=ko \\
1SG=hear & NEG & basket=DEIC & 3SG.F=3SG.F.do=OBV
\end{tabular}
(99)


The scope of negation is ambiguous with these sorts of sentences. In (99) the negative marker, which is as usual postverbal, can have scope over the complement clause, as shown in (99)', or over the sentence as a whole, as in (99)". It is not grammatical for the negator with scope over the manipulative verb to appear immediately following it, as in (99).
(99)
\begin{tabular}{lll} 
Nì=lóeng=ko te=angku nà & e=oe-oe & ka. \\
1SG-tell=OBV & 3PL=child play & 2PL=play-RED
\end{tabular} NEG
'I told the children not to play.' OR 'I didn't tell the children to play.'
(99)' [IP Nì=lóeng=ko [comp te=angku nà e=oe-oe ] ] ka.
(99)" [Ip Nì=lóeng=ko [comp te=angku nà e=oe-oe ka ] ].
(99) * nì=lóeng ka=ko te=angku nà \(\mathrm{e}=0 \mathrm{e}-0 \mathrm{e}\) ka 1SG-tell NEG=OBV 3PL=child play 2PL=play-RED NEG 'I told the children not to play.' OR 'I didn't tell the children to play.'

\section*{XXXXXXXXXXX}

\subsection*{15.6 Trying}

Complements of trying are expressed with the complex predicate è na 'try', which is separated from its complement clause by the obviative marker, indicating that conceptually there is a break in reference between the two clauses. The obviative is used even when the subject of trying and the subject of the complement are identical, because trying to do something and that something happening are not co-temporaneous. See 19.xx.xx for discussion of this morphosyntactic pattern. Another possible explanation is that expressing 'trying' is tantamount to acknowledging failure ('I tried really hard to pass the test (but ...)'), and so the notion of agentivity, central to the argument-based notion of the subject that is extended through Skou grammar, is not the same in both clauses. This, too, is discussed in more detail in the section that deals with switch reference, 19.5.
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline Nì=è na=ko & hòe & nì=li-li & li=pa & ra & wung & & \\
\hline \(1 \mathrm{SG}=\) try try=OBV & sago & 1SG=do & do=IN & & die & & G.F.go \\
\hline I tried to cook th & sago, & th & Iread & d dow & & & \\
\hline
\end{tabular}
\[
\begin{align*}
& \text { Nì=è na=ko } \quad \text { nì } \quad \text { pe=w-á-wá. }  \tag{99}\\
& \text { lSG=try try=OBV } \\
& \text { 'SG } \\
& \text { 'I tried to get her to hit me.' }
\end{align*}
\]

The predicate è na is one of those that have variable positioning of the adjunct nominal with respect to pronominal clitic placement; this is discussed in 14.5.

\subsection*{15.7 The morphosyntax of complementation}

We have seen that complementation in Skou presents a variety of alternate structures, with a wide range of interesting syntactic properties. Without doubt the most interesting feature of complementation in Skou involves the fact that not only the subject, but in fact all core arguments of the verb can show raising. The fundamental description of control does not involve the terms 'subject/non-subject', but rather 'core / non-core'.

\section*{16 Negation, quantification and obliques: the syntax of postverbal position}

There are no complications in the inflection of negated verbs such as is attested in many languages of New Guinea, with separate paradigms used when the clause they are in is negated. Similarly, the morphological marking of negation is accomplished quite simply by means of an invariant morpheme. Nonetheless, there are a number of morphosyntactic complications involved with negation in Skou, and these are dealt with in this chapter.

\subsection*{16.1 Negative clauses}

The expression of negation is morphologically simple in Skou, involving a single independent word with no changes in the paradigm of the verb and not alteration to case marking, but is syntactically complex. Propositions in sentences of all kinds can be negated with the particle ka postverbally; verb forms do not change to indicate that a verb has been negated. This can be seen with predicates of the three major words classes, noun, adjective and verb, in the following sentences.

Nominal predicate

> Ke=bà=fue a bápá-ne-nì=ne ka.

3SG.NF=person=that friend-1SG.DAT-1SG.GEN=1SG.DAT NEG
'That person is not my friend.'
Adjectival predicate
(2)

Pá-pè=pe=fue a rong ka.
house-3SG.F.GEN=3SG.F.DAT=that old NEG
'That house of hers isn't old.'
Verbal predicate
(3)
\[
\begin{array}{llll}
\text { Te=bà=ing a } & \text { hòe } & \text { te=t-ang } & \text { ka. } \\
\text { 3PL=person=the } & \text { sago } & \text { 3PL=3PL-eat } & \text { NEG }
\end{array}
\]
'Those people didn't eat (any) sago.'
In response to questions, the negator alone may be used to give a negative response, but it is more common to reply with the verb (or nominal or adjectival predicate) plus the negator. Simply repeating the question clause, with the addition of the negator, is also possible, but unlikely.
(4) Kóe
pe=w-á?
sago.pancake 3SG.F=3SG.F-roast
'Has she made the sago pancakes?'
(5)
\begin{tabular}{ll} 
Pe=w-á & ka. \\
3SG.F=3SG.F-roast & NEG \\
'She hasn't.' &
\end{tabular}
(6) \# Ka.

NEG
'No.'
If there are auxiliaries in the question, the negative response will usually simply involve the verb 'do', and not the main verb. It is completely ungrammatical to include the full auxiliary cohort with the negator (see below, and see 7.9.xxxx).
(7) Kóe pe=w-á e tue?
sago.pancake 3SG.F=3SG.F-roast 3SG.F.be 3SG.F.do
'Is she making sago pancakes?'
(8) \(\mathrm{Pe}=\) tue ka.

3SG.F=3SG.F.do NEG
'She isn't.'
(9) \# Pe=w-á ka

3SG.F=3SG.F-roast NEG
'She isn't.'
(10) * \(\mathrm{Pe}=\mathrm{e}\) tue ka.

3SG.F=3SG.F.be 3SG.F.do NEG
'She isn't.'
(11) * pe e ka tue

From the above examples it might be assumed that negation is simply marked clause-finally, a pattern common in Papuan languages from the eastern half of the island of New Guinea (Reesink 2000). This would give us the following model for the position of negation:

Negation: first attempt at a model (to be later falsified)
\[
\begin{equation*}
\mathrm{S}_{\mathrm{NEG}} \rightarrow \mathrm{~S} \quad \mathrm{NEG} \tag{12}
\end{equation*}
\]

The positioning of the negator is not, however, quite so simple. The negative morpheme appears before an auxiliary, if present, and is in fact simply immediately postverbal. This can be seen by examining data from certain verbal clauses with an auxiliary. It is true that in many cases an aspect that would be marked with the use of an auxiliary in a positive sentence occurs without one in a negative, as seen in the following pairs:

Positive sentence, auxiliary used
(13) Te hòe te=t-ang e ti.

3PL sago 3PL=3PL-eat 3PL.be 3PL.do
'They're not eating sago.'
Negated sentence, no auxiliary
(14) Te hòe te=t-ang ka.

3PL sago 3PL=3PL-eat NEG
'They're not eating sago.'
(15) * te hòe te tang ka e ti
(16) * te hòe te tang e ti ka

Examples in which the auxiliary is present in a negative clause are rare, but include (17), in which we can see that the marker of negation must occur preceding the auxiliary.
\begin{tabular}{llll} 
Te=inga & te=te-te & ka & ti. \\
3PL=the & 3PL=3PL.go-RED & NEG & 3PL.do
\end{tabular}
'They don't want to go.'
(18) * te ing a te te te ti ka

The sentence above shows the cooccurrence of ka 'negative' with the li 'do' auxiliary in a wanting clause. It is not possible for the 'be+do' complex auxiliary (7.9.xx) to be used in negated clauses, as in examples (13) and (14), above. In those cases where negation and an auxiliary do occur together we can see that the marker of negation appears between the verb and the auxiliary, and not clause-finally, as shown by the ungrammatical (18). The non-appearance of negation with the complex auxiliary means that the range of aspectual choices for negated clauses is less than that found in positive clauses, except for verbs expressing motion, as described in 7.9. To summarise the data presented there, the following correspondences between aspect marking involving auxiliaries in positive and negative clauses hold.

Table 171. Aspectual choices in negative clauses compared to positive ones
\begin{tabular}{lllll}
\hline \hline & \begin{tabular}{c} 
Positive \\
(all verbs)
\end{tabular} & \multicolumn{2}{c}{ Negative } \\
& motion verbs & other verbs \\
\hline complete & V & V NEG & V NEG \\
irrealis & V-RED & V-RED NEG & V-RED NEG \\
\begin{tabular}{ll} 
intentional \\
continuous
\end{tabular} & V-RED do & V-RED NEG do & V-RED NEG \\
\hline \hline
\end{tabular}

While morphologically quite straightforward, involving no special inflection for the verb, the addition of a negative to a verbal clause is syntactically complex, and involves substantial restructuring of the clause, both structurally and in terms of the grammatical status of the different nominals in the clause. In a verbal clause involving only subjects and objects as nominal participants there are no observable changes, but if there is an oblique or adjunct in the clause we see that in the negated clause the non-argument appears preverbally, as in the contrast between (19) and (20).

Motion-verbal predicate with a desiderative auxiliary
(19) Nì nì=re-re Te Tángpe Ii.

1SG 1SG=go-RED Skou Yambe do
'I want to go to Skou Yambe.'
Motion-verbal predicate with a desiderative auxiliary, negated
(20) Nì Te Tángpe nì=re-re ka li.

1SG Skou Yambe 1SG=go-RED NEG do
'I don't want to go to Skou Yambe.'
In this example the negator occurs after the verb re 'go', but before the auxiliary that carries the information about desire, li 'do'. Despite this it has scope over the entire clause, showing that it is clearly not attached on the basis of the verb's position, but rather to a position determined by the clause as a whole.

Based on this small amount of data alone, we might model the structure of the negative clause as shown in (21).

Negation: second false model
(21) \(\mathrm{S}_{\text {NEG }} \rightarrow\) SUBJ OBJ V NEG AUX (LOC)

This position, between the verb and the auxiliary, raises some interesting phrase-structural issues. The phrase structure of Skou place a goal nominal (as opposed to a simple location) in the position between the verb and the auxiliary, as illustrated here in the following sentence.
\[
\begin{align*}
& \text { Nì=re-re báng i li. }  \tag{22}\\
& \text { 1SG=go-RED beach be do } \\
& \text { 'I'm going to the beach.' }
\end{align*}
\]

When we negate such a sentence, with or without the auxiliary, the goal must appear preverbally, not in its normal postverbal position (if it is still mentioned overtly). \({ }^{64}\) The negated equivalent of the sentence above is presented first, and then equivalents without the auxiliary: in both cases, the goal must appear preverbally in the negative.

\section*{Negation of verbs with a motion component}
\[
\begin{array}{lll}
\text { Báng } & \text { nì=re-re } & \text { ka }  \tag{23}\\
\text { beach } & \text { li. } \\
\text { 'IG=go-RED } & \text { NEG } \\
\text { 'I'm not going to the beach.' }
\end{array}
\]

> Nì=re báng.
> 1SG=go beach
> 'I went to the beach.'
\[
\begin{align*}
& \text { Báng nì=re } \quad \text { ka. }  \tag{25}\\
& \text { beach 1SG=go } \quad \text { NEG } \\
& \text { 'I didn't go to the beach.' }
\end{align*}
\]

The use of a different auxiliary does not change the pattern for either the position of negation or its effects on the position of a goal, as can be seen in the following pairs; note that with an overt object in the clause, hòe, there are two possible positions for the negated location. Note also that the appearance of oblique arguments in a preverbal position in negated sentences applies to location adjuncts as well as to goal complements.
\begin{tabular}{lll} 
Póí & pe=r-ú & pa-lòe. \\
spinach & 3SG. \(=\) 3SG.F-chop \\
house-platform
\end{tabular}
(27) Pa-lòe pói pe=r-ú ka.
house-platform spinach 3SG.F=3SG.F-chop NEG
'She didn't chop up the spinach on the platform.'
Clearly the negative construction provides evidence for a certain commonality between (subcategorised for) obliques which are part of the event structure called for by the verb, and completely non-subcategorised for adjuncts which are purely peripheral to the clause.

\footnotetext{
64 It is more likely that the goal will not be mentioned at all; rather that (99), Nì re ka is more commonly heard. Mentioning that goal is associated with some degree of pragmatic salience.
}
(28) Hòe ke=k-ang i li Te Tángpe. sago 3SG.NF=3SG.NF-eat be do Skou Yambe 'He's eating sago in Skou Yambe.'
(29) Hòe Te Tángpe ke=k-ang ka. sago Skou Yambe 3SG.NF=3SG.NF-eat NEG 'He isn't eating sago in Skou Yambe.'
(29)' Te Tángpe hòe ke kang ka.
(30) Rópu-mè=me ko tue pá. book-2SG.GEN=2SG.DAT be.at 3SG.F.do house 'Your book is in the house.'
\begin{tabular}{lllll} 
Rópu-mè=me & pá & ko & tue & ka. \\
book-2SG.GEN=2SG.DAT & house & be.at & 3SG.F.do & NEG \\
'Your book isn't in the house.' & & &
\end{tabular}

With an instrument, which I normally found in pre- or postverbal positions (for at least some speakers), as shown in (32) - (34), we find that in a negative clause the postverbal position is not available, seen in the ungrammaticality of (36).
(32) Àti ke=pung tangkófo=pa. meat 3SG.NF=butcher knife=INSTR 'He's cutting up the meat with a knife.'
(33) Àti tangkófo=pa ke=pung.
(34) Tangkófo=pa àti ke=pung.
(35) Àti tangkófo=pa ke=pung ka. meat knife=INSTR 3SG.NF=butcher NEG 'He's isn't cutting up the meat with a knife.'
(37) Tangkófo=pa àti ke=pung ka.

We can thus determine that the marker of negation, ka, and the goal NP occupy the same position in the phrase structure, and in the event that two elements are specified by the semantic structure underlying the clause, both of which could appear here, only only may. In this competition for the position negation overrides the goal, and so only the negator appears postverbally. A model of the different positions in the sentences shown here as (31), (13) and (22) - (25) is given in figure 11xx. Here we can see quite clearly that regardless of the semantic role, or status as marked or unmarked, an oblique cannot appear postverbally in a negated clause.

Figure 11xx. Templatic model of negated sentences based on (31), (13) and (22) - (25)
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{Sentence} & \multicolumn{6}{|c|}{Sentential positions} \\
\hline & SUBJ & OBJ & VERB & GOAL / NEG & AUX & (LOC) \\
\hline (31) & rópu-mè=me & pá & ko tue & ka & & \(\leftarrow\) OBJ \\
\hline (13) & te & hòe & te=t-ang & ka & e ti & \\
\hline (22) & & & nì=re-re & báng & i li & \\
\hline (23) & & báng & nì=re-re & ka & i li & \(\leftarrow\) OBJ \\
\hline (24) & & & nì=re & báng & & \\
\hline (25) & & báng & nì=re & ka & & \(\leftarrow\) OBJ \\
\hline
\end{tabular}

Do these preverbal goals display more than just the positional properties of objects? That is, are there some morphosyntactic properties shared by objects, but not 'normal' postverbal goals, that are displayed by these preverbal goals in negated sentences? The answer is a clear 'yes'. As will be seen in chapter 15, the preverbal goal in negated sentences is eligible to show raising, which is otherwise restricted to clear subjects and objects in clauses. The negative construction, then, involves valency change when there is an oblique participant in the clause. What isthe explanation for this?

The fact that the typical postverbal oblique is an NP that is not subcategorised for by the verb lies at the heart of understanding this construction. Any oblique NP in a clause is, by virtue of its very presence where it is not absolutely required, pragmatically salient. Other evidence for this comes from an examination of those verbs that permit alternative APV and AVP orders (see 5.4.3), in which it is clear that the postverbal coding choice is associated with pragmatic prominence. Negation, too, involves pragmatic prominence, and in the competition for the postverbal position negation wins. The default coding choice in this situation is for the oblique to not be mentioned (see example (17), and footnote 50xx). If the oblique is salient enough to be mentioned even in a negated clause, then it is clearly salient enough to warrant coding as a core argument: core arguments are universally more salient than non-core NPs, evidenced in the existence and function of constructions such as applicatives and passives, both of which are found in Skou (see 13.2 and 13.3, respectively). Applicatives, which an object position for a participant which has an alternative coding option, \({ }^{65}\) are associated with more discourse-salient nominals (Donohue 2001a). Nonetheless, the presence of an oblique or adjunct, an optional element in the clause, is itself indicative of some degree of higher-thannormal topicality being associated with that participant, and this might reflect their common object-creating behaviour.

\subsection*{16.2 Negation and the predicate 'give'}

The constraints on the arrangement of a negated clause have been stated in terms of the grammatical functions of the nominals in the clause: a nominal which is oblique, if it is expressed in a negated clause, relinquishes its postverbal position to the negator, and appears

\footnotetext{
65 It is the existence of an alternative that differentiates the oblique:object alternation in the applicative from the oblique(adjunct):negative alternation found in the negative construction (Chapter 16), as well as the positional differences: the erstwhile oblique is a preverbal object in a negative construction, while it is a postverbal object in the applicative construction (unless negated).
}
preverbally, with a structural position and grammatical behaviour identical to that observed in objects.

We might wonder what the treatment is of the recipient 'goal' of verbs such as 'give'. The quandary exists because verbs such as 'give' take a preverbal theme P in addition to a postverbal recipient, but that postverbal recipient can be demonstrated to be an object, positionally coded in this postverbal position as an oblique, rather than being a participant bearing the grammatical function 'oblique'. The question of the ability of a single predicate to subcategorise for three core arguments is not an issue, since these predicates are usually paraphrased with a serial verb construction, and this resolves the issue of a single verb having an overly saturated subcategorisation frame. The first sentence below shows an non-negative sentence with the predicate meaning 'give' coded by two separate verbs, as is normal. The negated version in (39) presents the negator in sentence-final position, following both verbs, and the recipient of the second verb now appears preceding both verbs. A version in which the displaced recipient appears between the first verb and the second, seen in (40), is not grammatical.
\[
\begin{align*}
& \text { Rópu=ing nì=ké léng ke. }  \tag{38}\\
& \text { book=the } 1 \text { SG=get give } \\
& \text { 'ISG.NF } \\
& \text { I gave the book to him.' }
\end{align*}
\]
\[
\begin{array}{lll}
\text { Rópu=ing ke } & \text { ǹ̀=ké léng } & \text { ka. }  \tag{39}\\
\text { book=the } 3 \text { 3G.NF } \quad 1 \mathrm{SG}=\mathrm{get} \text { give } & \text { NEG } \\
\text { 'I didn't give the book to him.' }
\end{array}
\]
\[
\begin{array}{llll}
\text { * rópu=ing } \begin{array}{ll}
\text { nì =ké } & \text { ke } \\
\text { book=the } 1 \text { 1SG=get } & \text { 3SG.NF } \\
\text { 'I didn't give the book to him.' }
\end{array} & \begin{array}{l}
\text { léng } \\
\text { give }
\end{array} & \begin{array}{l}
\text { ka } \\
\text { NEG }
\end{array}  \tag{40}\\
\hline
\end{array}
\]

These data might be thought to show that the sequence of two verbs is treated as a single unit for the purposes of displaced postverbal arguments. This would, however, fail to take into account the special status of the recipient of 'give' as a non-oblique argument in a postverbal position. Other, more clearly oblique, nominals show a different pattern when they appear in clauses with multi-verb predicates that are negated.

For example, with the complex predicate ké i 'put', made up by the two independent verbs ké 'get' and \(i\) 'be', we find that the postverbal nominal píng 'table' does not necessarily appear displaced to a position preceding both verbs, as is the case for the recipient goal in the sentences (38) - (40) with the similarly complex predicate ké leng 'give'. Rather, the locative goal in (41), when displaced by the necessity to mark negation in the postverbal position, may appear either preceding both of the verbs that make up the complex predicate, or preceding just one of them. These two options for positioning the goal are shown in (42) and (43).
\[
\begin{align*}
& \text { Rópu=ing nì=ké i píng. }  \tag{41}\\
& \text { book=the } 1 \mathrm{SG}=\text { get be table } \\
& \text { 'I put the book on the table.' }
\end{align*}
\]
\[
\begin{array}{ll}
\text { Rópu=ing píng } & \text { nì=ké i } \tag{42}
\end{array} \quad \text { ka. }
\]
\[
\begin{align*}
& \text { Rópu=ing nì=ké píng i ka. }  \tag{43}\\
& \text { book=the } 1 \mathrm{SG}=\text { get table be NEG } \\
& \text { 'I didn't put the book on the table.' }
\end{align*}
\]

In this way the difference between a postverbal object, as seen with the predicate ké leng 'give', and a postverbal oblique complement, seen with ké i. Other postverbal noun phrases, serving as adjuncts, rather than complements, show the same behaviour as oblique complements, in terms of displaying both possibilities for displacement from the postverbal position.

\subsection*{16.3 Quantification and restrictions of the postverbal position}

The core arguments of a clause precede the verb (3.13). The postverbal position is the domain of most oblique arguments, and also of various 'adverbials', including floated quantifiers.

There are two universal quantifiers in Skou, nawò 'many, all' and fátà (which is rarely, but occasionally, heard as the variant táfà, a form that is more in keeping with the linguistic relatives of Skou) 'all, completely'. While they are semantically very similar, they behave very differently syntactically. Both quantifiers can appear in the normal position inside the NP that they quantify, as in the following two examples:
\begin{tabular}{ll} 
Naké nawò te=me & y-a tà. \\
dog all 3PL=3PL.return & 3PL-walk running \\
'All the dogs ran away.'
\end{tabular}
\begin{tabular}{lll} 
Naké fátà te=me & \(y\)-a tà. \\
dog all \(\quad\) 3PL=3pl.return & 3PL-walk running \\
'All the dogs ran away,
\end{tabular}

Unique to fátà, however, is the ability to appear in a postverbal position, as in (46), which has the same semantic content as (45), with some extra pragmatic salience on both naké and fátà (even though the two words are discontinuous) that is lacking in (45).
Naké te=me
dog 3PL=3PL.return
'All the dogs ran away.'

The quantifier nawò, seen in (44), may not appear floated away from its host NP in this fashion, as seen by the ungrammaticality of (47), which can be compared with the grammaticality of (45) and (46), which show that, despite their similar meanings, the two quantifiers have different syntax.
(47) * naké te moe ya tà nawò

Another example of a floated quantifier with a monovalent clause, this time nonagentive, along with the equivalent sentences showing non-floated quantification, can be seen in (48) and (49).

Te=balèng te=lé weng fátà.
3PL=male \(\quad\) 3PL=eye.PL sleep all
'The men are all asleep.'
\[
\begin{equation*}
\text { [ } \mathrm{NP} \text { Te balèng fátà ] te lé weng. } \tag{49}
\end{equation*}
\]

When a quantifier appears NP-internally it can only be interpreted as modifying the nominal that is head of the NP in which it occurs. In a bivalent clause, when there are two core arguments, there are two options for quantification: the normal NP-internal modification may occur, as in the following examples:
(50) [np Naké fátà ] pále te \(=y\)-a yú. dog all pig 3PL=3PL-walk chase 'All the dogs chased the pig(s).'
```

Naké [nP pále fátà ] te=y-a yú.
dog pig all 3PL=3PL-walk chase
'The dogs chased all the pigs.'

```

For both of these sentences the use of nawò 'many' inside the NP is also a grammatical way of adding a quantifier to the clause, with in both cases the same restrictions on interpretation: the quantifier must modify the noun in whose NP it is found, and cannot be taken as being restricted to a different noun. Sentences (trivially) illustrating these data are shown below.
(52) [np Naké nawò ] pále te ya yú.
'Lots of dogs chased the pigs.'
(53) Naké [np pále nawò ] te ya yú.
'The dogs chased lots of pigs.'
A floated quantifier in a bivalent clause is grammatical, but does not have unlimited restriction over simply any of the nominals in the clause: it can only refer to the object of the clause, not the subject:

Naké pále te=y-a yú fátà.
dog pig 3PL=3PL-walk chase all
'The dogs chased all the pigs.'
* 'All the dogs chased the pig(s).'

The restriction of the postverbal quantifier may not extend to the A , and not the P . Quantification of the A can be simply accomplished by the use of an NP-internal quantifier, as in (52), but not by postverbal floated quantification. Similarly, a postverbal nominal (a goal or location) may only be quantified NP-internally.

> * nì=re fátà \(\quad\) bàme.
> 1SG=go all village
> 'I went to all the villages.'
* bàme nì=re fátà.
village \(1 \mathrm{SG}=\mathrm{go}\) all
'I went to all the villages.'
Nì=re [np bàme fátà ].
1SG=go village all
'I went to all the villages.'
Can we then say that the restriction of a postverbal quantifier is only over an absolutive argument only, an S or P? The data presented so far is not the full story: in the case of a predicate with an adjunct nominal, then the quantifier can only be taken as referring to the nominal associated with the adjunct nominal position, and not the P of the sentence, suggesting that a characterisation of the restriction of the quantifier must refer to more than simply syntactic roles. In (58) the postverbal quantifier fátà will most naturally be interpreted as being restricted to the adjunct nominal concept 'arrow' (that which is released from a bow), and not over the P of the clause, palé.
(58)

Pále pìng nì=lú fátà.
pig bow \(1 \mathrm{SG}=\) release all
'I shot a pig/pigs with all (my) arrows.'
* 'I shot all the pigs.'

Note that when the adjunct nominal is not so easily countable, the quantifier cannot be interpreted as being restricted to it. Compare the restriction of the quantifier in (58), where the adjunct nominal is the preferred restriction, with that seen in (59) - (61), in which the quantifier can only be restricted to the \(S\) or the P , and not the unquantifiable adjunct nominal.
Te=ueme ráue te=j-á e ti fátà.

3PL=woman laughter 3PL=3PL='emote’ 3PL.be 3PL.do all
'All of the women laughed.'
* 'the women did all of the laughing'
(60) Rí rà ke=li fátà. wood fire 3SG.NF=do all
'He burned all of the wood.'
* 'he burned the wood with the whole fire'
```

Te=balèng te=ta y-ùng fátà.
3PL=man 3PL=sitting 3PL=sit all
'All of the men sat down.'

* 'the men did all of the sitting'

```

Data such as this, involving the restriction of the quantifier in clauses that involve an adjunct nominal as part of the predicate, complicate a statement restricting the reference of a floated quantifier to the absolutive argument in a clause. Another complication for the analysis of postverbal quantification as an absolutive-pivot selecting operation involves the quantification of obliques. It is not possible for postverbal floated quantifiers to occur in the same sentence as a postverbal oblique, as already exemplified. If the oblique appears in the preverbal topic position, quantification inside the NP is also, as would be expected, possible, as in (62).
\[
\begin{array}{cl}
{\left[\text { Topic } \left[\begin{array}{cl}
\text { Bàme fátà }=i n g ~ a ~] ~], ~ & \text { nì }=\text { re-re. } \\
\text { village all=the } & 1 \mathrm{SG}=\text { go-RED } \\
\text { 'I'll go to all the villages.' }
\end{array}\right.\right.} \tag{62}
\end{array}
\]

There are also instances of a topicalised obliquse appearing with a postverbal quantifier, as can be seen in (63).
\[
\begin{array}{lll}
\text { [TOPIC Pá-tè=te=ing ], } & \text { nì=ha fátà } & \text { nì=e. }  \tag{63}\\
\text { house-3PL. GEN=3PL.DAT=DEIC } 1 \text { 1SG=walk all } & \text { 1SG=ascend } \\
\text { 'All of their houses, I visited them.' }
\end{array}
\]

This instance of a goal appearing before the verb is not simply a case of a preverbal location with the NP remaining inside the clause, such as is found obligatorily when the clause is negated (16.1), but must be thought of as being a pre-sentential topic. The first argument against pá tè te ing in (63) not being clause-internal is that the clause is not negated, the only condition under which locations have been demonstrated to appear preverbally. This status can be demonstrated by contrasting the sentence above with the following, in which the preverbal oblique is clearly not functioning as the topic of the sentence, since there is another NP in that function.

\footnotetext{
(64)
\[
\begin{array}{cll}
\text { * }[\text { Topic te=balèng=ing }], & \text { bàme te=y-a } & \text { fátà } \\
\text { 3PL=male=DEIC village 3PL=3PL-walk } & \text { all } \\
\text { 'the men, they went to all the villages.' } &
\end{array}
\]
}

What, then, are the conditions on the restriction of a floated quantifier? We have observed the following constraints:
- the floated quantifier can refer to the single core argument of a monovalent verb;
- with a bivalent verb, the floated quantifier cannot be interpreted as being restricted to the A, but must be restricted to the P ;
- in a clause with a predicate involving an adjunct nominal, the floated quantifier cannot be interpreted as being restricted to the A , but must be restricted to the adjunct nominal (preferred scope) or the \(P\);
We might summarise these restrictions with a structural diagram: a postverbal floated quantifier must be interpreted as having scope over the non-adjunct that is closest, structurally, to itself and the verb. That is, given the tree in (65) the positions A, B and C are, in that order, the preferred interpretations for the scope of a postverbal quantifier: a quantifier will refer to. There is a clear preference for structurally close elements over those further away.
(65)


This structurally-based description of the restrictions on interpretation is not, however, a tenable position, since a nominal may appear in a sentence-initial topicalised position without a change in its possibility for being the restriction of the floated quantifier. Consider the following sentences, one with a topicalisated P and one without. The scope of the floated quantifier does not change with the changed position of the NP lang ing.
\[
\begin{array}{lll}
\text { Te=angku lang=ing } & \text { te=t-ang } & \text { fátà }  \tag{66}\\
\text { 3PL=child coconut/tuber.dish=DEIC } & \text { 3PL=3PL-eat } & \text { all }
\end{array}
\]
'The children have eaten all the lang.'
\[
\begin{align*}
& \text { Lang=ing } \quad \text { te=angku te=t-ang }  \tag{67}\\
& \text { coconut/tuber.dish=DEIC 3PL=child 3PL=3PL-eat } \\
& \text { 'The children have eaten all the lang.' }
\end{align*}
\]

This shows that a purely structural account of the scope of quantifiers cannot accurately model the facts. The fact that the quantifier is, structurally (as opposed to purely templatically) closer to the VP-sister ' C ' position in the tree in (65) is also suggestive that a structural analysis will not work. Instead, we must appeal to the syntactic roles borne by the arguments.

\section*{XXXXX}
the restriction of negation plus quantifier
I have one attested case of a negator and a postverbal location appearing in the same clause together, seen in (99). In this clause the fact that both the subject and the object are marked as being pragmatically salient, the object being coded as topical/given and the subject as pragmatially focussed, might go some way towards explaining this exeptional structure.
ya-lílípa=ka te=a te=ti-ti ka bàme, thing-all=FOC 3PL=PROM 3PL=3PL.do-RED NEG village 'they can't do all the things (that are necessary) in the village, ...'

\section*{xxxxxxxx}

When a single sentence contains auxiliaries and a quantifier, the quantifiers precedes the auxiliaries. This means that it is in templatically the same position as the goal of a motion predicate would appear in.
Te=angku lang=ing te=t-ang-tang fátà ti.
3PL=child coconut/tuber.dish=DEIC 3PL=3PL-eat-RED all 3PL.do
'The children want to eat all the lang.'

\section*{XXXXXXXX}

\subsection*{16.4 Negation and complex predicate constructions}

When a complex predicate in the form of a verb + adjunct nominal, or a serial verb construction, is negated, then the negation appears following all elements; the negative may not intrude between the separate members of the complex predicate.

Examine the following sentence, in which the goal of the predicate 'run back to', nì ' 1 SG ', appears in a preverbal position because of the presence of the negator ka sentence finally (the equivalent non-negated sentence would be K e ke moe ka tà toe nì). Firstly, the shunted oblique is not positioned immediately preceding the verb that codes it as a goal, toe, but rather the goal must appear preceding all of the verbs in the serial verb sequence, even though a verb such as ha tà may not subcategorise for a goal argument, and so nì cannot possibly be interpreted as being part of the structure of that particular lexical item. As (99)' and (99)" show, it is not grammatical for the fronted goal to appear anywhere else in the clause.


Sentences showing the ungrammaticality of the negator appearing anywhere but in final position are given in (99), (99)' and (99)".
(99) Ke ke=moe k-a tà toe ka.

3SG.NF 3SG.NF=return 3SG.NF-walk running 3.come NEG
'He didn't come running back.'
(99)' * ke ke moe ka tà \(\boldsymbol{k} \boldsymbol{a}\) toe
(99)" * ke ke moe \(\boldsymbol{k} \boldsymbol{a}\) ka tà toe

With complex predicates formed from a noun plus a verb, such as the adjunct nominal constructions that have been the subject of more examination in chapter 14, the same condition on the position of the negator, and the position of any fronted obliques, holds: the complex predicate is treated as a unit, and may not be interrupted.
Pá-nì=ne \(\quad\) ke=lú weng ka.
house-1SG.GEN=1SG.DAT \(\quad\) 3SG.NF=eye sleep
'He didn't sleep in my house.'
* ke lú pá nì \(\boldsymbol{n} \boldsymbol{e}\) weng ka
* pá nì ne ke lú \(\boldsymbol{k} \boldsymbol{a}\) weng

These data clearly show that the various complex predicates are single clauses, not sequences of clauses,
xxxxxxxxxxxxvvvb

\subsection*{16.5 The position of toe 'come' in negated control structures}

An exception to the generalisation that negation occurs in the final position in Skou clauses concerns the placement of toe 'come' in the clause. If toe is the sole predicate in the clause, then there are no exceptions, as in the following examples:
\[
\begin{array}{lll}
\text { Ke=angku=fue a } & \text { ke=toe } & \text { ka. }  \tag{99}\\
\text { 3SG.NF=child=that } & \text { 3SG.NF=3.come } & \text { NEG } \\
\text { 'That boy didn't come.' } &
\end{array}
\]

If, however, the clause with toe is embedded in another clause, then the negator may appear at the apparent end of the first clause.

Ke=angku nì=lóeng=ko ka toe.
3SG.NF=child 1SG=call=OBV NEG 3.come
'I called the child, but he didn't come.'
This is not found in control structures, such as (99) in which lóeng serves to code a command, not a simple calling out.
Ke=angku nì=lóeng ke=toe-toe ka.

3SG.NF=child 1SG=call 3SG.NF=3.come-RED NEG
'I told the child not to come.'
(99) * K e=angku nì=lóeng ka ke=toe-toe

This shows us that toe is not bound to a particular clause if it appears without proclitic agreement.

\subsection*{16.6 Summary of the syntax of negation}

The following points are the most salient ones involved in a description of negation:
- the negative morpheme appears postverbally, but precedes an auxiliary, if present. Auxiliaries may only appear in clauses involving involving bivalent or motion verb predicates;
- negation involves the treatment of any otherwise oblique nominals (whether they are adjuncts or complements), bearing recipient, goal, or location semantic roles, as objects in the clause;

\section*{17 Non-verbal predicates}

Non-verbal predicates are firstly distinguished by the lack of obligatory agreement clitics, wich are such a prominent feature of the verbal predicate. On the other hand, there can be agreement in the non-verbal predicate. We shall examine non-verbal predicates depending on whether they are nominal or adjectival, and the possibilities of agreement.

\subsection*{17.1 Nominal predication}

When nominals are used as predicates they appear in a form identical to that found in NPs, as has been mentioned in 8.6 . For instance, sentence (1) is a perfectly acceptable sentence with a nominal predicate, lacking any verb (note the tonal spreading seen from the root lálà, followed by application of the fall \(\rightarrow\) high / high tone sandhi rule. See 2.3.1.1).
```

Lálá-né-ǹ̀=ne kurù.
cross.cousin-1SG.DAT-1SG.GEN=1SG.DAT teacher
'My cousin's a teacher.'

```

This is the normal means of predicating a proposition with a noun, kurù in the example above. The order of the elements of the sentence is the same as in verbal clauses, with the predicate final. Of course, an inverted clause might be formed, with the topic and the comment switched for pragmatic reasons. The sentence below presents the same information as ( \({ }^{\prime} 1\) ), but with more emphasis on establishing the identity of the teacher, rather than explaining the occupation of the cousin (as is also true of the English translations of these sentences).
\[
\begin{align*}
& \text { K urù lálá-ne-ǹ̀=ne. }  \tag{2}\\
& \text { teacher cross.cousin-1SG.DAT-1SG.GEN=1SG.DAT } \\
& \text { 'The teacher is my cousin.' }
\end{align*}
\]

Note that (2) cannot be interpreted as a translation of 'My cousin's a teacher.' While this is not immediately apparent from these two examples, it is clearer when one of the two NPs is inherently pragmatically salient, and so is the topic, rather than the comment. Inherent salience is associated with the use of any free pronouns, and so while it is possible for (1) to be paraphrased as (3).
\[
\begin{array}{lc}
\text { Ke } & \text { kurù. }  \tag{3}\\
\text { 3SG.NF teacher } \\
\text { 'He's a teacher.' }
\end{array}
\]
the reverse is not possible, and (4), with the predicate preceding the background 'subject', is ungrammatical:
(4)
\[
\begin{array}{ll}
\text { * kurù } & \text { ke. } \\
\text { teacher } & \text { 3SG.NF }
\end{array}
\]
'The teacher is he.'
This shows that (3) cannot be interpreted as a word-order variant of (4), and so by extension (2) cannot be thought of as a word order variant of (1).

No unambiguous instances of oblique adjuncts to the clause in non-verbal clauses have been observed; strings such as
\[
\begin{array}{lcc}
\text { Ke } & \text { kurù } & \text { Te=Tángpe. }  \tag{5}\\
\text { 3sG.NF } & \text { teacher } & \text { Skou Yambe } \\
\text { 'He's a teacher at Skou Yambe.' }
\end{array}
\]
can be shown to best be interpreted as having the structure seen in (5)', with the oblique being an NP-internal modifier, and not a clause level modifier. It modifies as a verbless relative clause, showing the location of the head noun.
(5)' [np:Subj Ke ] [nP:PREd kurù [np:Relative clause Te=Tángpe ] ].
(5)" * [np:Subj ke ] [np:PRed kurù ] [np:oblique Te=Tángpe ]

Tests such as the placement of demonstratives confirm the constituency of kurù and \(T e=T a ́ n g p e\). The structure of (6) is shown in (6)'; the alternative placement of the demonstrative immediately following kurù is not grammatical, as seen in (6)".
```

(6) Ke kurù Te=Tángpe=ing a.
3SG.NF teacher Skou Yambe=the
'He's the teacher at Skou Yambe.'
(6)' [np:Subj K e ] [np:Pred kurù [np:Relative clause Te=Tángpe ] =ing a ].
(6)" * [NP:SUBJ ke ] [NP:PRED kurù =ing a ] [NP:OBLIQUE Te=Tángpe ]

```

A sentence that is even more likely to be used to express the meaning intended in (6) is the paraphrase seen in (7), in which the erstwhile oblique is coded as the 'possessor' of the predicative nominal. The only difference with a 'normal' possessive construction is that the genitive and dative marking is unlikely to be used; this is, however, simply because the possessor is in this case inanimate, and inanimates are often not coded on nouns and verbs.

Ke Te=Tángpe kurù(-ké=ke).
3SG.NF Skou Yambe teacher-3SG.NF.GEN=3SG.NF.DAT
'He's the teacher at Skou Yambe.'
which has the structure seen in (7)', showing an unambiguous nonverbal structure with two appositional NPs.

\section*{(7)' [np:Subj Ke ] [np:Pred [np:Possessor Te=Tángpe ] kurù(-ké=ke) ].}

There can be some verbal equivalents of otherwise non-verbal clauses with nominal predicates. An otherwise nominal predicate may appear with a light verb, li 'do', when it is used inchoatively, as seen in (8).
\begin{tabular}{lll}
Ni & kurù & nì \(=\mathrm{li}\). \\
1 SG & teacher & \(1 \mathrm{SG}=\mathrm{do}\)
\end{tabular}
'I've become a teacher.' / 'I am now a teacher.'

When a nominal predicate is in the complement of a clause with pung li 'want', then the verbal auxiliary is obligatory, in order to carry the irrealis aspectual inflection that is obligatory with this construction.
Nì=pung li kurù nì=li-li.
\[
1 \mathrm{SG}=\text { liver do teacher } 1 \mathrm{SG}=\text { do-RED }
\]
'I want to be a teacher.'
\((9)\) ' nì pung li kurù-rù
Numerous examples of nominal predicates can be found in the rest of this book. Details of the use of aspect with nominal predicates can also be found in 7.9.xx.xx.

\subsection*{17.2 Adjectival predication}

Adjectives used as predicates do not take any special morphology when they refer to inanimate referents, as in (10).
(10) Te Máwo Te Bapúbí Ialapalíli; Te Bapúbí=pa TeTángpe hangbang. Skou Mabo Skou Sai close Skou Sai=INSTR Skou Yambe far 'Skou Mabo is close to Skou Sai; Skou Sai and Skou Yambe are far (from each other).'

Other examples of adjectives as predicates have been discussed in the sections on word classes (5.5) and 10.5.3. In xx.xx we saw that support verbs are used with predicative adjectives to mark some aspectual distinctions that are otherwise not expressable with nonverbal predicates.

\subsection*{17.3 Oblique predication}

As with most languages, oblique nominals may serve as the predicate of a non-verbal clause in Skou. Unlike languages that have explicit marking for the semantic function of their oblique arguments, the morphological underspecification of obliques in Skou means that many nominals, when used in an oblique role without a verb to add context, are potentially ambiguous. For this reason many obliquely predicated clauses in Skou are normally used in conjunction with a semantically inexplicit verb. Compare, for instance, the difference in morphosyntactic coding choices between the following Standard Indonesian, Papuan Malay, and Skou sentences, all translating the same meaning:

Standard Indonesian
(11) lbu saya di rumah.
mother 1SG LOC house
'My mother's at home.'
Skou
\begin{tabular}{lll} 
Ánì-nì=ne & mong tue & pá. \\
mother-1SG.GEN=1SG.DAT & F.sit & 3SG.F.do house \\
'My mother's at home.' & &
\end{tabular}
\begin{tabular}{lllll} 
Papuan Malay & & & \\
Sa=pu mama & ada & di & ruma. \\
1SG=POSS mother & be & LOC & house \\
'My mother's at home.' & & &
\end{tabular}

In Standard Indonesian (related to the varieties of Malay that are native to western Indonesia and Malaysia) the sentence is completely acceptable, and pragmatically umarked, without a verb. In Skou, on the other hand, the only (highly marked) interpretation of the string Ánì nì ne pá is 'My mother is a house' (a possessive phrasal interpretation, 'my mother's house', is ruled out because of the lack of possessive marking on the noun - see 9.1 for details). We can compare these very ndivergent morphosyntactic choices with the morphosyntax of Papuan Malay, the variety of Malay that is used as a lingua franca in the area that Skou is spoken in, and which has been strongly influenced by the morphosyntactic patterns of the local languages, to the extent that it does not reflect many, or indeed most, of the typological characteristics of Standard Indonesian. In this language we can see that the norms of the languages of the area are reflected, and the preferred coding strategy has a verbal clause. \({ }^{66}\)

In the following example the benefactive predicate is 'it is for me', coded literally as 'my one'. The clause requires a verb, since 'it is mine' is a result (see \(\mathrm{xx} . \mathrm{xx}\) ), and not a state. Since nouns lack any inherent aspectual operators the phrase móe máki is not sufficient to impose an aspectual reading, nor is the predicate ke ing nì ne. In a sense, then te is functioning as a copular in this type of clause.

Móe máki te ke=ing-nì=ne.
fish big 3SG.F.go 3SG.NF=DEIC-1SG.GEN=1SG.DAT
'That big fish is for me.'
A predicate of simple possession does not require the use of te, as can be seen in (15).
Móe=ing nì=ne.
fish=DEIC 1 SG=1SG.DAT
'That fish is mine.'
This last construction, one encoding non-verbal possessive predication, is discussed in more detail in section 9.7.

\subsection*{17.4 Comparative constructions}

There is no morphological means of expressing comparison in Skou in a particular morphological construction, such as an equivalent of the English suffixes -er that appear on adjectives.The function of comparision is expressed in a sequence of like predicates, in which the last uttered predicate is usually (in the absence of any marked pragmatic changes in the sentence) interpreted to be the best exemplar of the predicate's qualities, and so the -est or -er property. This construction is open to both adjectives and verbs, as long as they express gradable states.

Thus in the first example below, although literally the question is '(Of) these three people, who is an old one?', interpretation conventions apply to make a sensible question

\footnotetext{
66 Diglossic speakers do allow Sa pu mama ada di ruma, but is it unlikely that this will be the most natural and most frequent form used by a speaker in non-formal communication.
}
(16) Te=bà héngtong=ing, bá ke=bà hue? 3PL=person three=DEIC who 3SG.NF=person old 'Of these three people, who is the old(est) person?'
\begin{tabular}{ll} 
Daud=ing a ke=bà & hue, \\
Daud=the \(\quad\) 3SG.NF=person old \\
Martha pe pe=bà & hue (bàmúa). \\
Martha 3SG.F 3SG.F=person & old true \\
'Daud is old, but Martha's older.'
\end{tabular}

Alternatively, the emphatic marker = wò may be used as an intensifier following the adjective:
\[
\begin{align*}
& \text { Q: Apóue lángpì ná, péngue lángpì ná? }  \tag{18}\\
& \text { jambu.sp tasty Q Qango tasty, Q Q } \\
& \text { 'Which is tastiest, the jambu or the mango?' } \\
& \text { A: Péngue=we langpí=wò. } \\
& \text { mango=this tasty=EMPH } \\
& \text { 'This mango is [tastier/tastiest].' }
\end{align*}
\]

Another means of expressing comparison is available in the word ana=ra. xxxxxxxx
Similarly there is no morphologically or syntactically dedicated means of expressing a superlative concept; the unmodified adjective, or alternatively the adjective with = wò added, it used, as in the example above.

\section*{XXXXXX}

Statements indicating the similarity of two things may be accomplished by the use of the words anara or anainga, both of which are complex. The =ra and =ing a are the deictics 'also' and 'the, respectively. The base to which they attach, ana, is here glossed simply as 'like', but is itself most likely complex, with the na formative being that also found in the dual pronouns.
(99) TeLóngpa pílang-tè=te=ing ana=ra / ana=inga

Enggros language-3PL.GEN=3PL.DAT=DEIC like=also like=the
Inggris pílang-tè.
English language-3PL. GEN
'The Enggros language is like English.'
These may also be used as predicates to the clause, or as modifiers in NPs. The following two examples both have the comparative inside the NP.
\begin{tabular}{lll} 
Ya-ne-nì=ne & pe=ing & [NP ke=bà \\
sister-1SG.DAT-1SG. GEN=1SG.DAT & 3SG.F=DEIC & 3SG.NF=person \\
íkáféng ana=ra ni=wi a] \(\quad\) pe=fí. & \\
tall like=also 1SG=this 3SG.F=meet & \\
'My sister met a man who was as tall as I am.' &
\end{tabular}

More commonly, if a comparative is used it will be used predicatively, as in the next examples. Note that for these it is not possible for ana=ing to be used, only ana=ra, as seen in the ungrammaticality of (99).
(99) [ NP Nì=nóe-para-nì=ne ] ana=ra 1SG=body-??-1SG1SG.DAT like=only
[nP ál nóe-para-ké=ke ]. father body-x-3SG.NF.GEN=3SG.NF.DAT 'My body is like my father's.'
(99) * nì nóepara nì ne ana ing a ái nóepara ké ke
(99) Ke ana=ra tánghang-mè=me nòe tue. 3SG.NF like=also face-2SG.GEN=2SG.DAT body 3SG.F.do 'He looks a bit like you.'
(99) TeMénglong pílang-tè ana=rá TePa pílang-tè. Kayu Pulau language-3PL.GEN like=also Tobati language-3PL.GEN 'The Kayu Pulau's language is like the Tobati's language.'
'The Kayu Pulau's language resembles the Tobati's language.'
While showing many similarities, the two comparatives, ana=inga and ana=ra, are not entirely replaceable by each other. We have already seen examples of the non-interchangeability of the two expressions in certain contexts. The following sentences also differ only in the choice of comparative, and yet show a clear grammaticality difference.
```

XXXXXXXXXXXX

```

\subsection*{17.5 Summary: the peculiarities of non-verbal predication}

We have seen that, while non-verbal predication is an option in Skou, there is a strong preference for verb-headed structures in the language, making the non-verbal predications less frequent than might otherwise be the case.

\section*{18 Non-statement speech acts}

A language in which every speech act was a statement, or assertion, of fact would be both very unusual, and also typologically marked to a degree unattested anywhere. As in all languages, not all clauses are used for statements, though there is not a one to one correspondence between grammatical encoding and functional use.

\subsection*{18.1 Commands ('Imperatives')}

Most commands are not formed with any special morphology or syntactic construction that is not present in a declarative clause, making the category 'imperative' one that does not have to be recognised on purely grammatical grounds.

Commands can be, and often are, issued with the contrastive focus marker ka as a clitic to the front of the verb. There is not a fixed order for this clitic with respect to the pronominal clitic, if that is attached directly to the verb.

In the sentences below the adjunct nominal intervenes between the pronominal clitic and the verb, and so there is only one possible sequence involving the focus clitic:
(1) Pe pe=ló weng.

3SG.NF 3SG.NF=eye.F sleep
'She's sleeping.'
(2) M è mè=lú ka=weng!
\(2 \mathrm{SG} \quad 2 \mathrm{SG}=\) eye \(\mathrm{FOC}=\) sleep
'You should sleep!' ~ ‘Go to sleep!'
With all other verbal predicates, namely those verbs which take an adjunct nominal before the pronominal clitic, or verbs that take an adjunct nominal following the verb, or verbs which lack an adjunct nominal altogether, there is no fixed order for the two clitics: either may occur first. The following sentences illustrate the alternative orderings of the pronominal clitic and the hortative clitic with a simple verb. There is no reported or observed difference in meaning between the two codings, indicating that the position of the clitic is phonologically, not syntactically, governed.

\footnotetext{
a. Nì mè=ka=fue!
\(1 \mathrm{SG} \quad 2 \mathrm{SG}=\mathrm{FOC}=\) see
'Look at me!'
b. Nì ka=mè=fue!
\(1 \mathrm{SG} \quad \mathrm{FOC}=2 \mathrm{SG}=\) see
'Look at me!'
}

The fact that the verb in the examples above does not take any prefixal inflection is simply a function if its being a non-prefixing root, and not a function of the construction in which it appears. Verbs that in declarative sentences display prefixation will also show this feature when used in imperatives, as the following sentences show.
(4)
a. \(M e ̀=k a=p-o e\)
ung!
\(2 \mathrm{SG}=\mathrm{FOC}=2 \mathrm{SG}\)-come now
'Come here now, you!'
b. Ka mè poe ung!

It is also quite acceptable for a command to appear without this clitic in use, as in (5).
(5) M è poe ung!
'Come here!'
At least some commands involve verbs that are uninflected for person. The following example has been found:

(Text 17 in Appendix 4)
In (6) we can see that not only is the verb, li, lacking any proclitic inflection, but it is also missing the fused 'prefixal' inflection: the 2 SG form of the verb li is pi, and this is not the form used. Based on this model, the following examples should be possible, and have been accepted.
(7) Ung loe wi a!
now come here
'Come here now!'
(8) Lú weng!
eye sleep
'Sleep!'
(9) \# Hòe ang!
sago eat
'Eat the sago!'
When questioned, informants all say that the sentences sound better with the subject agreement added. The commands in (7) and (8) are judged to be only slightly less polite and respectful than versions with subject agreement, but the transitive clause in (9) is felt to be quite 'abrupt' and rough (Malay: kasar). One possible explanation for the use of an uninflected verb in (6) is that is represents an instance of reported speech, something like 'I told (him) to make a small house.' This is not apparent in the translations offered for the sentence, \({ }^{67}\) butmight reflect the structure.

\footnotetext{
67 Papuan Malay: Sa=bilang "Bikin rumah kecil, sederhana", sa=bilang. 'I said "Make a small house, an average one".'
}

\subsection*{18.2 Questions ('Interrogatives')}

Interrogatives can be divided into two groups on morphological and syntactic grounds, content questions and yes/no questions. Yes/no questions can be formed simply by adding the interrogative particle ná to the end of a declarative sentence, as in the following example.

Declarative
\begin{tabular}{llll}
\begin{tabular}{ll} 
M óe=ing a \\
fish=the
\end{tabular} & mè \(=m\)-ang-mang & me & pi. \\
2SG=2SG-eat-RED
\end{tabular}\(\quad\) 2SG.be \(\quad\) 2SG.do
'You want to eat fish.'
Interrogative
\begin{tabular}{lllll} 
M óe \(=\) ing a & mè= \(=\) m-ang-mang & me & pi & ná? \\
fish=the & 2SG=2SG-eat-RED & 2SG.be & 2SG.do & Y/N \\
'Do you want to eat fish?' & & &
\end{tabular}

Content questions use one of the epistememes in the same place that a nominal with the same function occurs - there is no special structural position that attracts focussed nominals, and the ná that is found with yes-no questions is not used. The following different epistememes, or 'question words' (though calling them 'question words' does not adequately describe the range of meaning or range of function that they describe - see Mushin 1995 for the use of the term epistememe) have been identified:

Table 172. Epistememes ('question words') in Skou
\begin{tabular}{|c|c|c|c|}
\hline Epistememe & & Other senses & Scope \\
\hline what & ya & 'thing' & inanimate things \\
\hline who & bá, bá= & [related to bà 'person'?] & animate things, particularly humans \\
\hline which & -ha & & any nominally-designated person, place or thing \\
\hline where, which & nè & interrogative marker & any location or goal \\
\hline when & rángne & 'time-where' & time, past or future \\
\hline why & ya te & 'go (to) what' & purposes, motives, intended results \\
\hline how & ya=pa & 'with what' & material or immaterial means \\
\hline
\end{tabular}

These different morphemes do not belong to one word class, nor are they internally similar, in terms of all being free morphemes, or indeed single morphemes. Some of the words, ya and bá, seem to function in much the same way as free NPs do. Others, such as bá= and -ha, are not free forms, and can only occur attached to an independent word. In other cases we can see multimorphemic compounds, such as rángne 'when', composed of the free nominal ráng 'sun, day, time' and the interrogative nè 'which, where'. In the case of ya te and ya=pa the expression is not even necessarily a single word: ya te is simply a verb and an adjunct nominal 'go (for) what', and ya=pa could be argued to be a clause level clitic attached to the epistememe ya 'what', thus representing a construction consisting of a series of clausal units.

Examples of these different epistememes in use can be found in the following sentences. Ya 'what' appears in the same position that a nominal with its grammatical functions would normally appear. The following two sentences show that questioned objects appear in the position associated with object, and not in any special clause-initial or preverbal position. Following these, we can see that subjects, too appear in their normal clausal position. The subjects of monovalent verbs show identical behaviour, appearing in the same position that a non-interrogative NP would appear.

Questioned object
(12) Ke ya ke=k-ang-kang i li? 3SG.NF what 3SG.NF=3SG.NF-eat-RED be do 'What's he eating?'
(13) * ya ke ke=k-ang-kang i li?
what 3SG.NF 3SG.NF=3SG.NF-eat-RED be do
Questioned subject
(14) F etànghapa ya ku pe? morning what stab 3SG.F 'What poked into her this morning?' (for instance, a twig or a thorn)
\begin{tabular}{llll} 
* ya & fetànghapa & ku & pe? \\
what & morning & stab & 3SG.F
\end{tabular}

A questioned instrument shows the same mobility, and obligatory case marking, that characterises a normal instrumental NP. The question word ya, marked with the instrumental clitic = pa, may appear leftmost in the VP, left of a \(\mathrm{V}^{\prime}\), but not between an adjunct nominal and the verb, and not outside the VP.

Questioned instrument: adjoined to \(\mathrm{V}^{\prime}\)
\begin{tabular}{llll} 
M è & pále=ing a ya=pa & pìng & mè= \(=p-u\) ? \\
2SG & pig=the & what=INSTR & bow
\end{tabular} 2SG=2SG-release 'What did you shoot the pig with?'

Questioned instrument: adjoined to VP
\begin{tabular}{llll} 
M è & ya \(=\) pa & pále=ing a pìng & mè= \(=\) - \(u\) ? \\
2SG & what=INSTR & pig=the & bow
\end{tabular} 2SG=2SG-release 'What did you shoot the pig with?'

Questioned instrument: adjacent to V following adjunct nominal, ungrammatical
\begin{tabular}{clll} 
* mè̀ & pále=ing a pìng & ya \(=\) pa & mè \(=p-u ?\) \\
2SG & pig=the & bow & what=INSTR
\end{tabular} 2SG=2SG-release

Questioned instrument: leftmost in sentence, precedes subject, ungrammatical
\begin{tabular}{llll} 
* ya= pa & mè & pále=ing a pìng \\
what=INSTR & 2SG & \begin{tabular}{l} 
mè \(=p-u\) ? \\
pig=the
\end{tabular} & bow \\
\(2 S G=2 S G-r e l e a s e ~\)
\end{tabular}

Questions about the identity of one member of a set can be asked with the suffix -ha attached to the nominal in question. The nominal to which it is attached appears in its normal place in the clause. A nominal affixed with -ha cannot appear with any other modification other than possession, as can be seen comparing (16) with (17) and (18). In all cases -ha is
phonologically incorporated into the word to which it attaches, which is reflected in the patterns of tone association. In the examples presented here we can see the H of kóe spreading to include -ha, or the HL of bòeng being associated over two syllables.
\begin{tabular}{lll} 
K óe-há & mè=m-ang-mang & pi? \\
sago.pancake-which & \(2 \mathrm{SG}=2 \mathrm{SG}\)-eat-RED \\
'Which sago pancake do you want to eat?' & &
\end{tabular}
(21) Pe kóe-há-pè=pe mè=m-ang-mang

3SG.F sago.pancake-which-3SG.F.GEN=3SG.F.DAT 2 SG=2SG-eat-RED pi? 2SG.do 'Which of her sago pancakes do you want to eat?'

b. * kóe bápáli-ha mè=m-ang-mang pi? sago.pancake big-which 2SG=2SG-eat-RED 2SG.do
a. * kóe-há
ing a mè=m-ang-mang
pi?
sago.pancake-which the \(2 \mathrm{SG}=2 \mathrm{SG}-\mathrm{eat}-\mathrm{RED}\) 2SG.do
b. * kóe=ing a-ha
mè=m-ang-mang pi?
sago.pancake=the-which 2 SG=2SG-eat-RED 2SG.do

Occurrences of -ha are limited to inanimate nouns (exactly the class of nominalsthat cannot appear with the class marker bà= on predicative adjectives - see 10.6 and 10.7) xxxxxxxx, so it appears only rarely with subjects, but examples can be found. It is more commonly used with obliques, as in (25).
\[
\begin{array}{llll}
\text { K óng-há } & \text { kúkúfa } & \text { ku } & \text { nì? }  \tag{24}\\
\text { thorn-which } & \text { quickly } & \text { stab } & \text { 1SG } \\
\text { 'Which thorn poked me suddenly?' }
\end{array}
\]
\[
\begin{align*}
& \text { Ó mè=lóe fu bóeng-ha? }  \tag{25}\\
& \text { grub } 2 \text { fG=get.PL put.PL coconut.basket-which } \\
& \text { 'Which basket did you put the sago grubs in?' }
\end{align*}
\]

Locations and goals may be questioned with nè. Again, this word appears in the place that a location or goal would normally occupy, which means that the two are differentiated by their position with respect to an auxiliary, if present. Sentence (26) shows a questioned goal, and (27) a questioned location.
```

Te=ti-ti nè ti?
3PL=3PL.go-RED where 3PL.do
'Where are they going?'

```
\begin{tabular}{llll}
\(\mathrm{Pe}=\) mong & e & tue & nè? \\
3SG. \(=\) F.sit & 3SG.F.be & 3SG.F.do & where \\
'Where is she sitting? & &
\end{tabular}

Again, aclause in which the question word is positioned preverbally is ungrammatical, as shown in (28) and (29).
(28)
\[
\begin{array}{lll}
\text { * nè } \quad \text { te=ti-ti } & \text { ti? } \\
\text { where } & \text { 3PL=3PL.go-RED } & \text { 3PL.do } \tag{29}
\end{array}
\]
```

* nè pe=mong e tue?
where 3SG.F=F.sit 3SG.F.be 3SG.F.do

```

Time questions use the expression rángne, and place it at the beginning of the clause. This does not, of course, equate with sentence-initial position, since any element may appear as a topic, preceding the clause-initial time.

> Clause-initial time: [IP time ... ]
\begin{tabular}{lll} 
Rángne pe=ueme=fue a ùepung & pe=tue? \\
when \(\quad\) 3SG. \(\mathrm{F}=\) woman=that marriage & 3SG.F=3SG.F.do \\
'When did that woman get married?'
\end{tabular}

Clause-initial time, pre-clausal topic: [CP Topic [Ip time ... ]]
\[
\begin{align*}
& \mathrm{Pe=}=\text { ueme=fue a, rángne ùepung } \quad \mathrm{pe}=\text { tue? }  \tag{31}\\
& \text { 3SG.F=woman=that when marriage } \\
& \text { 'That woman, when did she get married?' }
\end{align*}
\]

When we examine sentences with objects we can observe that the time expression does not precede a topic. In (32) the topic appears initially in the sentence; in (33), on the other hand, the sentence is ungrammatical because the time expression appears outside its normal position in the clause.
\(\mathrm{Pe}=\) ueme=fue a, rángne hòe pe=tue?
3SG.F=woman=that when sago 3SG.F=3SG.F.do
'That woman, when did she stir the sago?'
Pre-clausal topic, time sentence initial: [CP TIME [CP Topic [IP ... ]] ]
(33)
\[
\begin{array}{lll}
\text { * rángne hòe=ing a, pe=ueme=fue a } & \text { pe=tue? } \\
\text { when sago=the } \quad 3 \mathrm{SG} . \mathrm{F}=\text { woman=that } & \text { 3SG.F=3SG.F.do } \\
\text { 'When did that woman get married?' }
\end{array}
\]

Ya te 'why' can only be used for questioning a conscious motive, and is not used to explain non-controlled events or states. The following overheard diatribe shows a rhetorical question using ya=ing a 'the (interrogative) reason' to form the question. In (35) we can see that forming the question with ya te is not grammatical.
\(\begin{array}{rlll}\text { (35) * ya te } & \text { pílang-nì=ne à } & \text { ka? } \\ \text { thing } & \text { 3SG.F.go } & \text { language-1SG.GEN=1SG.DAT clear } & \text { NEG }\end{array}\)
On the other hand, using ya=inga with controlled predicates is acceptable, though is has very strong and somewhat accusatory tone with these clauses. (36) and (37) were offered as examples of the contrast between the two interrogatives. Note the number of discoursally motivated markers in (36), compared to the plainer (37): in (36) we can see not only =ing a on
ya, but also =wea=fa=wò on ung a. This is a clear indication of the greater pragmatic force associated with ya ing a.
Ya=ing a ung \(a=w e a=f a=w o ̀ ~\)\(\quad\) mè= moe \(\quad\) p-oe?
\begin{tabular}{lll} 
Ya te ung a=we mè= moe & p-oe? \\
thing 3SG.F.go now=this 2SG=return & 2SG-come \\
'Why have you come home now?' &
\end{tabular}

Examples of the use of bá 'who' in various syntactic roles can be seen in the following sentences, presenting the bá in a question, and then an appropriate response.

Questioned predicate of non-verbal equative clause
Ke=bà=ing a bá?
3SG.NF=person=the who
'Who's that (man)?'
Ke=bà=ing a \(\quad\) ke=áì-nì=ne.
3SG.NF=person=the 3SG.NF=father-1SG.GEN=1SG.DAT
'That man is my father.'
Questioned A
(40) Bá mè ong ke=k-e?
who 2SG refusal 3SG.NF=3SG.NF-refuse
'Who refused you?'
(41) Ke mè ong \(k e=k-e\).

3SG.NF 2SG refusal 3SG.NF=3SG.NF-refuse
'He refused you.'
Questioned S
(42) Bá pe=mong tue pá=ing a?
who 3SG.F=F.sit 3SG.F.do house=the
'Which woman lives in that house?'
(43) \(\mathrm{Pe}=\) bahúe-nì=ne=ra pe=mong tue

3SG.F=elder.sibling-1SG.GEN=1SG.DAT=also 3SG.F=F.sit 3SG.F.do pá=fue a.
house=that
'My elder sister is the one who lives in that house.'
Questioned P
(44) Mè bá mè=fue?

2 SG who \(2 \mathrm{SG}=\) see
'Who did you see?'
(45) Mè ke=angku mè=fue.

2SG 3SG.NF=child 2SG=see
'You saw a boy.'

Questioned OBL
\[
\begin{array}{lc}
\text { Ke=k-a tà } & \text { toe } \\
\text { 3sG.NF=3SG.NF-walk running } & \text { b.come } \quad \text { who a? } \\
\text { 'Who's that that he ran up to?'/ 'Who did he run up to?' } \tag{47}
\end{array}
\]
\begin{tabular}{lll} 
(Ke=k-a tà & toe) & áìnì=ne. \\
3SG.NF=3SG.NF-walk running & 3.come & father-1SG.GEN=1SG.DAT \\
'(He ran up to) my father.' & &
\end{tabular}

The only exceptional morphosyntax that is used in interrogatives is the optional replacement of the normal pronominal agreement clitic with the interrogative clitic bá= 'who' when the subject is both questioned and animate. There are thus two structures for questioned subjects in clauses with predicate agreement, shown below, with examples of each.

\(\emptyset \quad\left(\mathrm{NP}_{\mathrm{P}}\right)\) who=V
Ya mè=pi?
what \(2 \mathrm{SG}=2 \mathrm{SG} . \mathrm{do}\)
'What did you do?'
(51) Mè ya mè=pi me pi?

2SG what 2SG=2SG.do 2SG.be 2SG.do
'What are you doing?'
When a verb allows for alternative codings for the P , with both preverbal and postverbal options being realised, then the interrogative may appear in either the preverbal or the postverbal position, as can be seen in the following sentences. Note the post-auxiliary position of the question word in (53) means that it has been coded as a location, not as a goal.
(52) Mè bá mè=m-éng me pi?

2SG who 2SG=2SG-ask 2SG.be 2SG.do
'Who are you asking?'
\begin{tabular}{llll} 
M è=m-éng & me & pi & bá? \\
\begin{tabular}{ll} 
2SG=2SG-ask & 2 SG.be \\
'Who
\end{tabular} & 2SG.do & who
\end{tabular}

The behaviour of bá in agreement is discussed further in the following section. Note that there is another asymmetry between the animate-referring bá and inanimate-referring agreement in relative clauses as well, discussed in 8.3.4.

\subsection*{18.2.1 The peculiar behaviour of 'who'}

While inanimates referents can only be questioned in place, there is an alternative for animate subjects. This has already been mentioned in 6.3.3.1, and will be briefly mentioned again here.

The pronominal agreement clitics can be replaced by the animate interrogative bá 'who':
```

Hòe-nì=ne bá=k-ang?
sago-1SG.GEN=1SG.DAT who=3SG.NF-eat
'Who ate my sago?'

```

This must be parsed as \(\mathrm{NP}_{\mathrm{P}} \mathrm{V}\), rather than \(\mathrm{NP}_{\mathrm{P}} \mathrm{NP}_{\mathrm{FOC}} \mathrm{V}\), as evidenced by the following sentence that attempts this latter strategy, still with agreement on the verb, and the subsequent sentence that shows subject agreement allowed when the subject is in the normal sentential position:
(56) Bá hòe-nì=ne ke=k-ang?
who sago-1SG.GEN=1SG.DAT 3SG.NF=3SG.NF-eat 'Who ate my sago?'
This use of the interrogative as a proclitic on the verb is not an option available to nonhuman subjects:
\[
\begin{align*}
& \text { * hòe-nì=ne ya=k-ang? }  \tag{57}\\
& \text { sago-1SG.GEN=1 SG.DAT what=3SG.NF-eat } \\
& \text { 'What (animal) ate my sago?' }
\end{align*}
\]

The use of the interrogative clitic bá= is also discussed in 7.3.3.1.
A questioned possessor is marked in various ways. One possibility is with the interrogative in the place of the genitive suffix, and the non-feminine dative clitic following, as in the following example:
```

Lang-bá=ke mè=b-é?
bowl-who=3SG.NF.DAT 2SG=2SG-get
'Whose bowl did you take?'

```

If the owner is known to be female, then feminine genitive forms may be used with a nominal interrogative possessor, but the feminine clitics may not follow the interrogative when it is in the place of the genitive:
\begin{tabular}{ll} 
Bá lang-pè & mè=b-é? \\
who bowl-3SG.F.GEN & 2SG=2SG-get \\
'Whose bowl did you take?'
\end{tabular}
(60) * lang bá pe mè bé?

This shows that the clitic 'who' is a particularly marked construction. Furthermore, it is apparent that 'who' does not have a grammatical gender that is compatible with feminine gender, and must simply be classed as non-feminine. This matches the observed default assignment of dative clitics to the free form of 'who' when it marks a beneficiary about whom the speaker has no idea whether they are male or female, as in (61).
\begin{tabular}{lllll} 
Ánì, & mè & nalé & lang=ing & bà=ke \\
mother & 2 SG & taro & pounded. dish= DEIC & who=3SG.NF.DAT \\
mè= pi & me & pi? & \\
2SG=2SG.do & 2SG.be \(\quad 2\) SG.do & \\
'Mum, who are you making the pounded taro for?'
\end{tabular}

\footnotetext{
XXXXXXXXXXX
}

\subsection*{18.3 Interjections}

In Skou, as in probably all natural languages, there is a small, but potentially open, class of interjections. What is perhaps unusual in Skou is the fact that most of the commonly used interjections, or other verbal markers of listener solidarity with the speaker, are in fact grammatical utterances: there are very few uses of paralinguistic verbal gesture in Skou. The different interjections are, however, strongly conventionalised, and while they are a potentially open class, they are in practise rarely altered or added to in any way. For instance, while Pí mè me bamúa is a perfectly normal and unremarkable utterance, often heard when two people are conversing, it would be odd and perhaps conversation stopping to hear someone say Pí mè me bamúa wò 'You're so right.' This is perfectly grammatical, but is not the expected interjection, and so would probably be taken as a genuine attempt to interrupt and swap conversational roles. The creativity in the system comes from the fact that many people do, despite this, personalise or customise certain interjections, and use these individual forms in speech. One person might, then conventionalise Pí mè me bamúa wò in their speech, and be known to be the person who says things that way; but this would not, then, become the locus of a change in the speech community as a whole.
\begin{tabular}{|c|c|c|c|}
\hline \multicolumn{3}{|c|}{nì=lúe} & 'I'm with you.' \\
\hline & \(1 \mathrm{SG}=\) hear & & 'Yep, go on.' \\
\hline \multicolumn{4}{|l|}{'I hear you.'} \\
\hline \multicolumn{3}{|l|}{Bamúa=wò} & 'That's right.' \\
\hline \multicolumn{3}{|l|}{true=EMPH} & 'That's true.' \\
\hline \multicolumn{4}{|l|}{'The truth.'} \\
\hline \multicolumn{3}{|l|}{\multirow[t]{3}{*}{Pí-mè=me bamúa speech-2SG.GEN=2SG.DAT true 'Your words are true.'}} & 'You're not wrong.' \\
\hline & & & 'That's so right.' \\
\hline & & & That's so right. \\
\hline
\end{tabular}

In addition to these 'native' Skou interjections, various interjections from Malay (and, to a much lesser extent, Tok Pisin - the second last example below) are in use, to differing degrees, in different parts of the Skou speech community. Some examples of the most commonly noted of these interjections are:
\(\mathrm{B}[\varepsilon]\) tul
true
'(That's) true.'
Bagitu
that.way
'That's how it is.'
Ya (i)tu!
yes that
'That's it!'
Ya Tuhan!
yes God
‘Oh my God!.'
Oloma!
boy-o-boy
'Wow!'
\(\begin{array}{ll}\mathrm{Ya} & \text { (i)tu! } \\ \text { yes } \\ \text { that }\end{array}\)
‘That's it!'
'Right, I agree, That's right'
'That's the truth.'
'Isn't that the way it goes.'
'That's so right.'
‘That's it!’
‘My God!'
'My goodness!.'
‘Wow!'
'That's it!'

Additionally, in Skou Sai, the village with the highest rate of marriage across the border, there are reports of various Wutung language-based idioms creeping in to the speech of the people there, perhaps as a markers of marriage links, and thus family unity, with the more numerous Wutungs who live so close by.

\subsection*{18.4 Summary of speech acts}

In this chapter we have examined a variety of morphosyntactically distinct clause types, and in addition seen that the same grammatical clause type can, in general, be used for more than one speech act. As with most languages of the world, there are no observed differences in terms of word order between interrogative and non-interrogative sentence types, though we must note the exception of those clauses that have a questioned animate subject, where there is an option for that subject to be marked on the verb by means of a special interrogative clitic.

We can note comparatively that in I'saka (Donohue and San Roque 2004) there is a special set of interrogative subject prefixes that are identical to the 2 SG prefixes. In I'saka there is no phonemic contrast between \([\mathrm{b}]\) and \([\mathrm{m}]\), and so the contrast in Skou between the \([\mathrm{b}]\) of the interrogative clitic bá= and the [mi \(]\) of the 2 SG clitic mè= would be collapsed, but it is likely that the collapse in categories in I'saka reflects the collapse in the contrast between nasal and nonnasal stops in that language. The apparent similarity between interrogative prefix/proclitic forms, and the 2 SG forms is thus not an accident in Skou alone, but is attested more widely in the family to which it belongs.

\section*{19 Conjoining, coordination, and switch reference}

Conjunctions may apply at different levels in a grammar: nouns, N's, noun phrases, verbs, V's, verb phrases, or even whole sentences. In Skou there are different constraints on what is and what is not grammatical in conjunctions depending on both the kinds of constituents conjoined, the kinds of lexical items that head those constituents (this is especially true for nominal conduction), and also the kind of conjunction that is used (especially true for clausal conjunction). In some instances it is questionable whether what we are observing is in fact true conjunction, as there are definitely elements of subordination involved as well.

\subsection*{19.1 Coordination of nominals}

Nominals may be conjoined in several different ways. With non-animate items, the usual strategy is to coordinate by placing the instrumental marker after each of the nouns that are coordinated.
(1) Nì=re hòe-pa anabí=pa ha=pa nì=loe hí.
\(1 \mathrm{SG}=\) go sago-water machete=INSTR bag=INSTR 1SG=get.PL go.down 'When I get to the sago swamps, I put down the machete and bag.'

Since non-animate nominals are not typically the instigators of actions that would require verbal predication, there is no confusion about the xxx

We can only conclude that the series of nominals in (1) have a flat structure, as shown in (1)', in which both anabí and ha are sisters within the one NP.
(1)'


With animate conjoinees this strategy, or a variant thereof, is also found, and since they are animate they may also be found as subjects of the verb, and hence eligible to influence the form of agreement marked on that verb. Additionally, if the verb agrees with a combination of their features, then one of the two (or more) conjuncts may be omitted, provided it is retrievable from the information on the verb. If the conjuncts are all human, then it is normal for a summarising
pronoun to occur at the end of the conjunct phrase. Note that this is not the same construction as an ergative-marking pronoun in a bivalent clause, as can be seen by the fact that the summarising pronouns in the following examples occur with monovalent clauses.

Examples of each of the combinations of these strategies that have been attested are shown in the examples below. Following their initial presentation, in an illustrative sentence accompanied by a schematic representation of the string involved, I discuss each of the different strategies in turn.
\(\mathrm{X}=\) pa \(\mathrm{Y}=\) pa \(\mathrm{PRO}_{\mathrm{x}, \mathrm{y}} \quad \mathrm{AGR}_{\mathrm{x}+\mathrm{y}}: \mathrm{V}\)
(2) \(N i ̀=p a \quad\) bápá-ne=pa anake ne=ta n-ùng-nung ti.
\(1 \mathrm{SG}=\mathrm{INSTR}\) friend-1SG.DAT=INSTR 1DU.NF 1 PL=sitting 1PL-sit-RED 1PL.do
'My friend and I are going to sit down.'
\(\mathrm{X}=\mathrm{pa} \mathrm{Y}=\) pa \(\quad \mathrm{AGR}_{\mathrm{x}+\mathrm{y}}: \mathrm{V}\)
Nì=pa bápá-ne=pa ne=ta n-ùng-nung ti.
\(1 \mathrm{SG}=\mathrm{INSTR}\) friend-1SG.DAT=INSTR 1PL=sitting 1PL-sit-RED 1PL.do
'My friend and I are going to sit down.'
X=pa Y=pa \(\quad\) AGR \(_{x}: V\)
Nì=pa bápá-ne=pa nì=ta hùng-hung li.
\(1 \mathrm{SG}=\mathrm{INSTR}\) friend-1SG.DAT=INSTR, 1SG=sitting sit-RED 1PL.do 'My friend and I are going to sit down.'
\(\mathrm{Y}=\mathrm{pa} \quad \mathrm{AGR}_{\mathrm{x}+\mathrm{y}}: \mathrm{V}\)
Fé-ung te=bà=pa ne=n-úng. tomorrow-now 3PL=person=INSTR 1PL=1PL-drink 'I'll drink with them tomorrow.' / 'We'll drink (together) tomorrow.'
\(\mathrm{Y}=\mathrm{pa} \quad \mathrm{AGR}_{\mathrm{x}}: V\)
\begin{tabular}{lll} 
Bápá-ne=pa & nì=ta hùng-hung & Ii. \\
friend-1sG.DAT=INSTR & 1SG=sitting sit-RED & 1PL.do
\end{tabular} 'My friend and I are sitting down.'

If the sum total of the conjoined elements is more than two, then there are two alternatives: either a regular nonsingular pronoun may be used, or the actual number may be mentioned following a classifier procliticised with a specifier pronoun, as in (7).
\begin{tabular}{lllll} 
Theo=pa & Melki=pa & Neles=pa & te=bà & \begin{tabular}{l} 
héngtong
\end{tabular} \\
Theo=INSTR & Melchior=INSTR & Cornelius=INSTR & 3PL=person & three
\end{tabular}

Of course, in the case of a nonverbal clause, there is no agreement on the predicate, since there are no agreement markers for nouns or adjectives. (Adjectives can take agreement proclitics in one instance, when they are used inchoatively; this has been discussed in 5.3 and 7.2.1). It could be argued that in this case they are in fact zero-derived verbs. This analysis is not pursued here.) In the following sentence the conjoined nominals Te Pa and Te Lóngpa function as a topic in the sentence, and are not represented pronominally in any way inside the clause.
[ \(\mathrm{NP} \mathrm{TePa=pa} ,\mathrm{Te} \mathrm{Lóngpa=pa} \mathrm{te]} \mathrm{pílang} \mathrm{áling}\).
Tobati=INSTR Enggros=INSTR 3PL language one
'Tobati and Enggros speak the same language.'
In addition to the NP pa NP pa ... construction a host of alternative conjoining mechanisms are also used. Not all of them show conjunction in the NP, but rather show the conjunction through the clash of agreement features present on the verb when compared to the NP. Yet others show a series of not-quite specified NPs joining together.

If both of the conjuncts are non-pronominal, then one coordination strategy involves a reduced form of the dual pronoun. This reduced form indicates the person and number, but not gender, of the whole conjoined NP, and appears at the end of the first conjunct; often a complete pronoun also appears at the end of the whole conjoined NP. Recall from 6.2 that the regular third person dual pronouns are tenake '3DU' and tenape '3DU.F'. Examine the pronominal forms in (9) - (10); the slash notation PRO/GDR has been employed to represent a dual pronoun with the explicit gender marking (-pe 'feminine' or -ke 'unmarked') omitted. In (9) there is a reduced pronoun at the end of the first conjunct, and a full pronoun at the end of the whole NP. In (10) the second pronoun is not found, only the reduced medial pronoun being found.
\[
\begin{array}{lllll}
\mathrm{X} & \mathrm{PRO} / \mathrm{GDR} & \mathrm{Y} & \mathrm{PRO}_{\mathrm{x}, \mathrm{y}} & \mathrm{AGR}_{\mathrm{x}+\mathrm{y}}: \mathrm{V}
\end{array}
\]
(9) Theo tena Gideon tenake te=moe ti pá. Theo 3DU/GDR Gideon 3DU.NF 3PL=return 3PL.go house 'Theo and Gideon went back home.'
\[
\begin{equation*}
\mathrm{X} \quad \text { PRO/GDR } \quad \mathrm{Y} \quad \mathrm{AGR}_{\mathrm{x}+\mathrm{y}}: V \tag{10}
\end{equation*}
\]
```

        隹a e-ke, te hòe
        3SG.NF=person-male 3DU/GDR wife-3SG.NF.DAT 3PL sago
        te=j-á te hí,
        3PL=3PL-pound 3SG.F.go go.down
        'A man and his wife, they're pounding sago so it goes down (to the
        basket), ...'
    ```

The next two sentences show that it is possible for one conjunct element to be non-overt. In (11) the first NP is overt, and the reduced pronoun is found: this implies that there must be a second half to the conjunct, and the nonsingular agreement on the verbs also makes clear that there must be another NP implicit in the clause. In (12) the same sentence is found, but with agreement for only one of the conjuncts, the non-overt one. Note from the translation, which reflects the structure of the Skou construction, that the non-overt conjunct must be interpreted as 3SG.NF, as this is the sole marking on the verb. In (13) we can see that it is also possible for the agreement to not match the overt NP at all, but with the non-overt conjunct.
\[
\begin{align*}
& \text { Y PRO/GDR } \quad \text { AGR }{ }_{x+y}: V \\
& \text { Bápáne tena te=ta n-ùng-nùng }  \tag{11}\\
& \text { friend } \quad \text { 3DU/GDR 3PL=sitting 3PL-sit-RED } \\
& \text { '(He/She/They)'ll sit with my friend.'.' }
\end{align*}
\]
(12) Bápáne tena ke=ta k-ùng-kùng li.
friend 3DU/GDR 3SG.NF=sitting 3SG.NF-sit-RED do
'He'll sit with (his) friend.'
* (she/they)'ll sit with my friend'
(13)
\[
\begin{array}{lll}
\text { Ke=angku tena } & \text { pe=ta w-ùng-wùng } & \text { tue. } \\
\text { 3SG.NF=child 3DU/GDR } & \text { 3SG.F=sitting 3SG.F-sit-RED } & \text { 3SG.F.do } \\
\text { 'She'll sit with (her) friend.' } & &
\end{array}
\]

When the second conjunct is not overtly mentioned, the conjoined-NP-final summarising pronoun may not appear. In other words, the final pronoun must be hosted by the second conjunct, and cannot be found simply appended to the first conjunct, as (14) and (15) attempt.
(14) * bápáne tena tenake ke ta kùng kùng li
(15) * bápáne tena tenake te ta yùng yùng li

A variant of this construction is found for conjuncts expressing a dual inclusive, 'you (SG) and me'. For this the regular first person dual inclusive pronoun amane is used, and not a reduced form; this pronoun 'counts' as qualifying for inclusion in this construction because there is no gender marking in the first person inclusive pronoun that can be omitted, and so in effect is a pronominal form that represents the regular free form, but with marking for gender omitted. An example is given in (16).
```

Y PRO/GDR AGR
Nì amanè ne=ta n-ùng-nùng.
1SG 1DU.IN 1PL=sitting 1PL-sit-RED
'I'll sit with you.'

```

Here the specifying pronoun nì serves to delimit the reference of amanè: the first person dual inclusive that includes me. The specification of the first person part of the pronoun with a specifying pronoun means that the default reference of the rest of the pronoun, the second person component, is now interpreted as the primary deictic scope of the pronoun in its use in this clause.

A restriction on the use of the reduced dual pronouns is that, in addition to their being exactly two conjuncts, at least one of the two must be animate and human, and it must be presented first in the sequence. Compare the grammaticality of (17) with (18), and (19) with (20).
\begin{tabular}{|c|c|c|c|}
\hline \multirow[t]{2}{*}{Martha dog} & tena & pále & \(\mathrm{n}=\mathrm{fe}\). \\
\hline & 3DU/GDR & & \multirow[t]{2}{*}{1SG=see.PL.P} \\
\hline \multicolumn{3}{|l|}{'I saw Martha and a pig.'} & \\
\hline \multicolumn{4}{|l|}{* pále tena M artha nì fe} \\
\hline
\end{tabular}
\begin{tabular}{llll} 
Nì pále tena & wúng & nì \(=\) fe. \\
1SG & pig & 3DU/GDR \\
'I saw a pig and a stone.'
\end{tabular}
(20) * nì wúng tena pále nì fe

When both conjuncts are non-human the reduced dual pronoun strategy may not be used, but the two (or more) nominals may be joined with the structure X ung Y ung:
\begin{tabular}{llll} 
Naké & ung & pále & ung \\
dog and.NH & pig & nì=fe. \\
'I saw a dog and a pig.'
\end{tabular}
\begin{tabular}{llll} 
Rí ung & wúng & ung & nì=fu. \\
wood & and.NH & stone & and.NH
\end{tabular} 1SG=see.F
'I saw some wood and a stone.'

The construction with ung may not be used if one of the conjuncts is human and the other one is non-human, or if both are human. Both must be non-human in order for the X ung Y ung pattern to be used, and both must be either animate or inanimate: a conjunct with one (nonhuman) animate nominal and one inanimate nominal is not grammatical.
(23) * pále ung Martha (ung) nì=fe pig and.NH Martha and.NH 1SG=see.PL.P 'I saw the pig and Martha.'
(24) * M artha ung pále ung nì fe

'I saw some wood and Theo.'
\begin{tabular}{lllll} 
* rí & ung & pále & ung & nì=fe \\
wood & and.NH & pig & and.NH & 1SG=see.PL.P
\end{tabular}
'I saw some wood and a pig.'
Yet another coordination strategy uses the conjoiner hana between the conjoined elements; it can be combined with a full pronoun, including gender information, summarising the complex NP.
(27) Nì hana \(M\) elki ne=ta n-ùng.
\(X\) hana \(Y \quad \mathrm{AGR}_{x+y}: V\) 1SG and friend 1PL=sitting 1PL-sit
'Melchy and I sat down together.'
(28) Nì hana bápáne anake ta n-ùng-nùng ti. 1 SG and friend 1DU.EX sitting 1PL-sit-RED 1PL.do 'My friend and I will sit down together.'

The second part of the conjunction hana most likely is etymologically related to the -naformative that is found in most of the dual pronouns (see 6.2), but which is not synchronically productive.

The following examples show that it is not possible for oblique arguments to be conjoined. In the first example we can see that the normal functional solution to conjoining two goals is by restating the entire VP that contains each goal; it is not possible to use one of the conjunction strategies that we have reviewed above to simply conjoin the two goal NPs, as can be seen in the ungrammatical sentences shown as (29)' - (29)"'.
(29) Nì=re-re À Abe=pa nì=re-re Nofé.
\(1 \mathrm{SG}=\mathrm{go}\)-RED Abepura=INSTR \(1 \mathrm{SG}=\) go-RED Jayapura
'I'll be going to Abepura and Jayapura.'
(29)' * nì re re Àbe pa Nofé
(29)" * nì re re Àbe pa Nofé pa
(29)"' * nì re re Àbe hana Nofé

The fact that a goal never shows agreement of any sort of the predicate, whether by proclitic, vowel alternations, or choice of suppletive stems, means that many of the common
conjoining options that are used with conjoined (animate) subject seen earlier do not apply to this situation.

We should not think that conjunctions is limited to preverbal nominals, or restricted from appearing with postverbal ones. Although they are coded in the same postverbal, pre-auxiliary position as are goals such as those seen in (30), recipients of verbs such as ké leng 'give' are not oblique (as demonstrated by their behaviour in raising clauses), and they behave as nonoblique arguments for the purposes of conjunction. This can be seen in the following example, in which conjunction is permitted.
\[
\begin{array}{llll}
\text { Rópu=ing a } \quad \text { nì=lóe } & \text { leng } \quad \text { Theo=pa } & \text { ke=barí=pa. }  \tag{30}\\
\text { book=the } \quad 1 S G=\text { get.PL } & \text { give } & \text { Theo=INSTR } & \text { 3SG.NF=headman=INSTR } \\
\text { 'I gave the books to Theo and the headman.' } &
\end{array}
\]

\section*{XXXXXXXX}

\section*{A complicated example}

The following example shows some of the strategies outlined above used in combination. Here we can see that both the conjunction hana between the first conjunct and the rest, and a complex second conjunct that itself consists of two parts; the first is non-overt, and the second appears with the clitic = pa marking its position within a conjunct phrase. The only trace of the first conjunct is in the summation pronoun appearing finally in the NP. The verb shows the combined features of all elements of the subject NP, the first person from the first element and the plurality from the second. The overall structure of the conjuncts in the NP in (31) is shown in (31)'.
[ X hana [ \(\mathrm{Y}=\mathrm{pa} \quad \mathrm{PRO}_{\mathrm{y}, \mathrm{z}}\) ]] \(\mathrm{AGR}_{\mathrm{x}+(\mathrm{y}+\mathrm{z})}: \mathrm{V}\)
\(\begin{array}{llllll}\text { Nì hana bápá-ne=pa } & \text { te } & \text { ne=ta n-ùng-nùng ti. } & \\ \text { 1SG and } & \text { friend-1SG.DAT=INSTR } & \text { 1PL } & \begin{array}{l}\text { 1PL=sitting 1PL-sit-RED }\end{array} & \text { 1PL.do }\end{array}\) 'My friends and I sat down together.'


I assume that the summation pronoun is external to either of the conjoined NPs, and that it is not itself one of the conjuncts.

XXXXXXXXX

\section*{Eligibility for conjunction}

The patterns of conjunction presented above do not apply to all NPs; the internal nature of the NP does not make a difference (though we have seen that some strategies are only available
when at least one member of the coordinated pair is pronominal), but the grammatical function that the NP plays is important. Specifically, postverbal goals may not be coordinated in these fashions, but rather must show conjoined VPs, as in (32). Here we can see that it is not possible to conjoin Te Ó eti and M òru in the one NP, regardless of the coordination strategy employed.
\begin{tabular}{lll} 
Nì=re-re & TeÓ eti=pa & nì=re-re
\end{tabular} M òru.

With a postverbal location, on the other hand, such coordination is possible:
```

mong tue-tue Te Lúng=pa, Te Lángfa,
F.sit 3SG.F.do-RED Ormu=INSTR Tanah Merah
'(the canoes) are at Ormu, and at Tanah Merah ...'

```

This fact of coordinated locations might initially appear to be an inconsistency in the treatment of the postverbal obliques, but it should be remembered that these two kinds of arguments show other differences as well, including involving positional restrictions and aspectual possibilities in negated sentences.

Object NPs may and do display all of the coordination possibilities found for subjects, showing another argument for separating the core and oblique arguments. Note that postverbal objects, such as the recipient of verbs of giving (see 5.3.4), or the low-transitive objects of low-affect verbs (see 5.3.3.3) do allow for coordination, providing another argument that these arguments are not obliques, but rather obliquely-coded objects. Some examples of conjoined objects, both pre- and postverbal, are shown in (36) - (37xxx999more). The lack of agreement on the verb for objects means that many of the reduced conjunct options that have been exemplified for conjoined subjects are not available for objects. Only for human objects are there alternatives to the \(\mathrm{X}=\mathrm{pa} \mathrm{Y}=\mathrm{pa}\) construction, since only with humans are summation pronouns commonly used, or more commonly a classifier + pronoun:
\[
\begin{align*}
& \text {...anabí=pa ha=pa nì=loe hí. }  \tag{36}\\
& \text { machete=INSTR bag=INSTR } 1 \text { SG=get.PL go.down } \\
& \text { 'I put down the machete and bag.' } \\
& \text {... ìngno pe=w-é r-ung }  \tag{37}\\
& \text { banana 3SG.F=3SG.F-get 3SG.F-give } \\
& \text { Maria=pa ya-pe-pè=pe. } \\
& \text { Maria=INSTR sister-3SG.F.DAT-3SG.F.GEN=3SG.F.DAT } \\
& \text { ' } . . \text { she gave the bananas to Maria and her sister.' }
\end{align*}
\]

XXXXXXXX

\subsection*{19.2 Cosubordination of verbs}

This form of combination, also known as serialisation, has been dealt with in 12.4 in the more general discussion on serial verbs. Skou mainly exhibits contiguous serialisation in constructions that are unproblematically serial verb constructions. The only exceptions are those that employ these constructions to mark an instrument, with ké 'get', or a source, with ha
'from', which are used in noncontiguous serial verb constructions, and have been described in chapter 11.

\subsection*{19.3 Coordination of clauses}

Clauses are often simply coordinated by juxtaposition, with no formal morphological or syntactic marker of conjunction, and intonation alone serving as the marker of their status. This is found in perhaps the majority of clauses (the interested reader can check the clauses presented in the texts in appendix 4), especially those which do not involve the same subject in two adjacent clauses. Some short and transparent examples from these texts include:
(99) Tangí ke=moe toe, táng=ing te=bíng fátà.

Tangí 3SG.NF=return 3.come bird=DEIC 3PL=die.PL all
'Tangí came back home, and all of the birds were dead, ...'
\[
\begin{array}{ll}
\begin{array}{ll}
\text {... pe=M áwo } & \text { te=ueme pe te=úepong } \\
\text { 3SG.F=Skou Mabo } & \text { 3PL=woman 3SG.F 3PL=marriage } \\
\text { pe=toe-toe } & \text { Te Ó eti yahénglong te=fu-fu. } \\
\text { 3SG.F=3.come-RED Wutung brideprice 3PL=put.down-RED } \\
\text { 'Skou Mabo women, they'd marry the woman and she'd come home with } \\
\text { them, and Wutung would pay the brideprice.' }
\end{array} \tag{99}
\end{array}
\]

In both these cases the coordination is unmarked, either by an over coordinator of by means of one of the over switch reference markers. The use and function of the switch reference system is presented in section xx19.5xx, but the use of both zero-coordination, such as is seen above, and coordination involving overt coordinators beyond the switch reference choice, is the topic of this section. In addition to zero-marked coordination of the sort seen above, the following overt conjunctions are also found:

Table 173. Coordination markers in Skou
\begin{tabular}{lll}
\hline \hline Conjunct & Semantic range \\
\hline X ing a Y & Y happened because of the implications of X \\
X wa ko te Y & Y happened immediately subsequent to X \\
X te Y & Y happened as an immediate and direct \\
consequence of X
\end{tabular}

The first three of these different marking strategies, as well as zero-coordination, are discussed in the following sections. The final two strategies in table 173 xx are the subject of the next major section, as they are the markers of switch reference. These two coordination strategies are mutually exclusive: marking with switch reference morphology means that one of the overt conjuncts cannot be used, and vice versa.

\subsection*{19.3.1 Reason}

Clauses expressing the reason for which another clause's predicate occurs may be coded with either the reason clause or the subsequently-determined event clause as the main one. The first example shows how it is possible for the reason clause to be coded as the main clause, and the subsequent event to be a plain declarative clause, with no special morphology. The 'word' ing a [ik], elsewhere used as a marker of definiteness (and analysable as involving two morphemes 4.7), can be used on either of the clauses to indicate a subordinate reason for another clause, as in the following example.
\begin{tabular}{|c|c|c|}
\hline Ka-ung a=wi a just-now=this & \[
\begin{align*}
& \text { ǹ̀=moe }  \tag{99}\\
& 1 \mathrm{SG}=\text { return }
\end{align*}
\] & kóeho loe, border come \\
\hline ing \(\boldsymbol{a}\) pa & nì=hí-hí & 1 i . \\
\hline the water & 1SG=wash-R & do \\
\hline
\end{tabular}

An alternative way to code this same statement would be for the marker of subordination, =ing a, to appear at the end of the reason clause, leaving the subsequent event clause as the main clause in the sentence. This is seen in (99); note that it is preferable for some mention of time to occur in the main clause, regardless of whether or not this is the reason for the event.
\begin{tabular}{clll}
\begin{tabular}{c} 
Ka-ung a=wi a
\end{tabular} & nì= moe & kóeho & loe=ing a, \\
just-now=this & 1SG=return & border come=the \\
\begin{tabular}{clll} 
\# (ung a) & pa & nì=hí-hí & li. \\
now & water & 1SG=wash-RED & do
\end{tabular}
\end{tabular}
'Because I've just now come back from the border, I want to wash now.'
Furthermore, there are several ways to express two clauses in which one is the reason for the other. Partly the availability of choice depends on the semantics of the verbs, and partly it appears to be a matter of speaker preference. The following sections present various alternatives to the coding of the notion of one event being the reason behind another, with the subsequent event marked.

\subsection*{19.3.1.1 ing \(a\), 'because'}

We have already seen two examples of the use of ing a to indicate that two clauses are connected, with one being the reason for the other. There are two schema that we can consider for the placement of the relevant morphology:

Reason with ing a
\[
\begin{array}{lll}
\text { [SUBORDINATE REASON } & \text { ]=ing a [MAIN CLAUSE EVENT } & \text { ] } \\
\text { [MAIN CLAUSE REASON } & \text { ], [ing a SUBORDINATE EVENT } & \text { ] } \tag{99}
\end{array}
\]

The order of the two clauses is quite fixed; the only case in which a reason clause would follow the subsequent event clause would be in the case of an afterthought: the speaker would have already presented a statement, and then in the afterthought be offering some prior justification for it. The reason clause is, in this second case, necessarily the subordinate one.

A textual example of ing a used enclitically to a clause can be seen in the following sentence.
```

Páng-né-nì=ne wung=ing a, nì pe=bàro.
husband-1SG.DAT-1SG.GEN=1SG.DAT die=the 1SG 3SG.F=widow(er)
'My husband has died, so I'm a widow.'

```

The use of ing a to mark the event as subordinate, rather than the reason clause as subordinate, can be found in the following extract (Tangí, lines 18-24).
\[
\begin{align*}
& \text {... pìng }[\varepsilon], \quad \text { ping te=te } \quad \text { te=we fí táng, pà=ing a. }  \tag{99}\\
& \text { bow 3PL=3PL.do 3PL=leave bird } \\
& \text { '[his] bow, they left it with the birds, in the cult house.' }
\end{align*}
\]
Ing a te=ueme hìngtung Tóe tena Háue, the 3PL=woman two Tóe 3DU/GDR Háue 'And because of that the two women, Tóe and Háue, ...'
\begin{tabular}{llll} 
tena=pí=a, & te=te, & tilong & te=nà \\
3DU/GDR=even=PROM & 3PL=3PL.go & doorway & 3PL=open \\
pe=jí & toe, & & \\
3SG.F=open 3.come & \\
'those two, they went, and they opened the door, ...,
\end{tabular}

In this text extract we can see that ing a, while appearing at the beginning of a clause, clearly refers to the contents of the preceding clause as the reason that it highlights.
xxxxxxxxxxxxxxx

\subsection*{19.3.1.2 wa ko te, 'because'}

Another way to indicate a reason or cause for a subsequent clause is with the sequence wa ko te. As with ing a, this indicates that there must be a conditioning factor, but wa ko te has the sense of a much more direct causal connection between the two linked clauses. Another point of dissimilarity with ing a, is that wa ko te is a complex sequence, with the following internal structure:
\[
\begin{aligned}
& \text { w-a=ko te } \\
& \text { 3SG.F-come=OBV 3SG.F.go } \\
& \text { (Literally) 'come (from there) and then go (to somewhere else).' }
\end{aligned}
\]

Examples of this used as a conjunction show that the use of 3SG.F forms is clearly not in reference to a third person singular feminine subject, and must be taken simply as supporting evidence for these being grammaticalised forms. In the following sentence it is clear that there is no third person singular feminine participant, yet the 3SG.F forms of the verbs may not be varied.


The difference between a reason being expressed with ing a and one expressed with wa ko te appears to be one of temporal sequencing: with wa ko te the conclusion of the first clause gives the preconditions for the necessity of the second, while ing a allows for a simple stative reason.

\subsection*{19.3.1.3 te, 'because'}

Yet another variant on the possibilities for translating 'because' into Skou involves using the same 3SG.F inflection of the verb 'go', the same form that is used in wa ko te 'because' in the
previous section. The one verb 'go' can be used alone with a similar sense to the lengthier expression. A difference between that last construction and this one involves relative time reference: when te is used on its own, the time reference of the first clause significantly precedes that of the second clause, and is an obvious cause of the second clause.xxxx
(99) hxxxxxxxxxx
xxxx
The use of =te as a conjunction may be compared to the interrogative collocation ya=te 'why', literally 'what (it) goes'. If this etymology is correct, then sentences involving this interrogative, too would be at least historically best analysed as involving a complex sentence with a series of clauses.

\subsection*{19.3.2 Purpose: 'in order to'}

There is no dedicated morphosyntactic structure in use to encode the sense of 'in order to' in English. Rather, the clauses are juxtaposed, with the purpose clause following the main clause. There are no markers of switch reference in these sentences; a typical example can be seen in (99), where the only indication that there is any sense of purpose in the second clause comes from the reduplication of the verb stem and the serialisation with the auxiliary li, which, given that the verb in the first (main) clause does not display any reduplication, indicates that the two verbs do not share the same TAM values (see xx.xx), and so must not be so tightly bound as a serial verb construction would require.
\[
\begin{align*}
& \text { Nì=re pá=fuea pále=ing a nì=fu-fu li. }  \tag{99}\\
& \text { 1SG=go house=the pig=the } 1 \mathrm{SG}=\text { see. F-RED do } \\
& \text { 'I went to that house to look at the pig.' }
\end{align*}
\]

An alternative translation for this sentence would be 'I went to the house and want to look at the pig.'

The subordinate clause in this sentence is identical to a simple clause expressing wanting by means of reduplication and serialisation with the auxiliary li 'do', as in (99).
\begin{tabular}{|c|c|}
\hline Pále & nì \(=\mathrm{fu}\)-fu \\
\hline pig & 1SG=see.F-RED \\
\hline & t the pig \\
\hline
\end{tabular}
'I want to look at the pig.'
More details on the expression of 'wanting' can be found in 15.xx.xx. For the purposive construction, we may schematise the juncture found in the construction as follows:
(99) [ Clause [SUBORD Clause: irrealis, involved ] ]

XXXXXXX

\subsection*{19.3.3 Unmarked coordination}

Most instances of coordinated clauses in Skou consist simply of two clauses juxtaposed together; they do not involve any overt morphosyntactic marker or conjunction, but are simply found with a non-final intonation contour at the end of the first clause. One textual example of such a chain of two clauses can be seen in (99).
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline (99) & ] epa[in] & hoe & toe, & te= & & \multirow[t]{2}{*}{\[
\begin{aligned}
& \text { ne=moeng, } \\
& \text { 1PL=sit }
\end{aligned}
\]} \\
\hline & Japan & com & 3.come & & & \\
\hline & \multicolumn{6}{|l|}{'So the} \\
\hline
\end{tabular}
\begin{tabular}{llllll} 
Te=hoe & toe, & tu & jíngpa & e & tue=we a \\
3pL-come.landwards & 3.come & ship & fly & 3SG.F.be & 3SG.F.do=this
\end{tabular}
te=hoe toe, pìng-, pìng te=r-ú, 3PL-come.landwards 3.come war- war 3PL=3PL-release 'the plane flew in and landed, and war, they waged war, ...'
xxxx

\subsection*{19.4.3 Complex interactions}

These sentences, taken from the texts presented in appendix 4, are presented as examples of complex combinations of the different kinds of discourse-structuring devices that have been introduced.

The first example below shows apposition in the first clause between pe=Máwo 'Skou Mabo females' and the more specific (in terms of age delimitation) te=ueme 'women'; this is the topic of the clause, repeated inside the clause with a free pronoun pe 'she/her'. In the next line the final NP is yahénglong 'brideprice', which is repeated at the beginning of the next clause, a tail-head linkage, which proceeds to a parallelism with the Malay term mas kawin 'brideprice'. The whole clause then shows parallel structure with the previous one, differing only in terms of the choice of tense/aspect on the clause.


Many other examples of these sorts of complex interactions between parallelisms used to expound details of an explication, and clause linking serving to extend a narrative, can be found in the recorded Skou materials. Just as relevant, however, and more morphosyntactically
constrained, is the grammar associated with switch reference marking in Skou sentences. This is the subject of the next section.

\subsection*{19.4 Adverbial clauses of time}

Some adverbial clauses showing time settings are expressed with the switch reference system described in the following section, since these morphosyntactic devices are dedicated to expressing the relationship between two events, with temporal overlap or with the first stated event preceding the second event. The lack of a switch reference mechanism to express the sequence of a first event following the second stated event, or to show the temporal overlap of two semantically only obliquely related clauses, leads to other codings for some adverbial time clauses, such as those described in the following subsections.

\subsection*{19.4.1 'when'}

What would be classified in English as adverbial clauses of time are in Skou best treated as two separate categories, one being perhaps a genuine clause-level adverbial, and the other representing a serial verb construction, in which the apparently nominal temporal expressions are used in verbal syntactic positions.
\[
\begin{array}{lll}
\text { Ka-ung a=wi a } & \text { nì=moe } & \text { kóeho loe. }  \tag{99}\\
\text { just-now=this } & \text { 1SG=return } & \text { border come } \\
\text { 'I've just now come back from the border.' }
\end{array}
\]
\[
\begin{array}{lll}
\text { Rángléng nì=moe-moe } & \text { li, rángpáng-páng tue. }  \tag{99}\\
\text { afternoon } & \text { 1SG=return-RED } & \text { do night-RED }
\end{array}
\]
'I'll go home in the afternoon, it's getting on for night (then).'
\[
\begin{array}{lll}
\text { Rángpáng-páng } & \text { ko tue. }  \tag{99}\\
\text { night-RED } & \text { be.at } & \text { 3SG.F.do }
\end{array}
\]
'It's getting on for night.'
xxxx

\subsection*{19.4.2 Time sequencing}

Although it is not usual, the time adverbial may sometimes follow the main clause. In this case there is never any indication of verb-like behaviour on the part of the temporal sequence. Sentence (99) is one of only a few examples with a postclausal temporal, and it might in fact represent an example of an explicit time added after the clause as an afterthought, rather than being a true 'normal' positioning possibility for time expressions. Here the temporal expression is in the form of a relative clause modifying (loosely) rángùe 'time'.
\begin{tabular}{lll} 
Nì=ra=fue \(\quad\) ka, rángùe & ke=toe. \\
1SG=also=see \(\quad\) NEG time & 3SG.NF=3.come \\
'I didn't see, when he came.' &
\end{tabular}
Ù e pung \(\quad\) nì \(=\mathrm{li} \quad\) ké náhìpa ti \(=\) fue a.
marriage \(\quad 1 \mathrm{SG}=\mathrm{do} \quad\) moon eight
'I got married eight months ago.'

Other means of indicating temporal relationships involve the frequent use of the switch reference system, which allows for the marking of different temporal sequences as well as for different identities of subjects. This, in combination with the use of aspectual marking on one or both of the verbs (recall from xx.xx that each verb in a sequence is fully specified for all inflectional categories, unlike many languages of New Guinea), makes for a system that is easily capable of expressing fine distinctions in clause combinations.
(99) Pa nì=hí i li=ko, ke=toe.
water \(1 \mathrm{SG}=\) wash be do=OBV \(3 \mathrm{SG} . \mathrm{NF}=3\).come
'I had just started to want to wash when he came.'
\(=\) 'He came when I had just started to want to wash.'
\[
\begin{align*}
& \text { Pa nì=hí-hí li=pa ke=toe. }  \tag{99}\\
& \text { water 1SG=wash-RED do=INSTR 3SG.NF=3.come } \\
& \text { 'I was washing, and then he came.' } \\
& =\text { 'He came when I was washing.' }
\end{align*}
\]

More specialised combinations in clausal combinations can be expresed with other aspectual marking on the first clause, with the same switch reference marking linking the two clauses.
\[
\begin{align*}
& \text { Pa nì=hí loeng=pa ke=toe. }  \tag{99}\\
& \text { water 1SG=wash finish=INSTR 3SG.NF=3.come } \\
& \text { 'I finished washing he came.' } \tag{99}
\end{align*}
\]

Pa nì=hí=pa ke=toe.
water 1 SG=wash=INSTR 3 SG.NF=3.come
'I was washing when he came.'
(99) * pa nì hí loeng ko ke toe.

XXXXXXXXXXX

\subsection*{19.5 Switch reference}

A switch reference system can be uncontroversially defined as the presence of a final verb/medial verb distinction in a language, in which only the final verbs show a full range of inflectional possibilities. By contrast the medial verbs merely mark what is similar or different to the values present in the following clause. By this definition there is no switch reference system in Skou.

On the other hand, there is a paradigmatic alternation, most commonly found on non-final verbs, which manifests a difference between same or different reference between the two clauses. Unlike switch references systems in many other languages, switch reference in Skou is a morphological marker that appears in addition to normal finite inflection for the verb. A typical language of New Guinea with a switch reference system (often called 'medial verb forms' in the literature) marks either the normal inflectional categories on the verb (for a final verb), or it marks the verb as being dependent in a chain, and shows the relation, both temporal and in terms of the reference of the arguments it contains, to the following clause. This is listed as the 'basic' option in table 174 xx . For some languages it is more complex, and in the case of different reference of the two subject arguments the medial verb coding the values of the argument in the current clause, but with different morphology to that found on final verbs. A further complication to this advanced model involves preemptively marking the agreement for
the following clause on the clause with a medial verb. Skou, as can be seen, simply takes a normal final verb, with all its inflection for arguments and T/A/M, and adds a marker of coreference or non-coreference.

Table 174. Morphosyntactic structures in switch reference
\begin{tabular}{|c|c|c|c|}
\hline & Final verb & & Medial verb \\
\hline \multirow[t]{2}{*}{Basic} & \multirow[t]{2}{*}{T/A/M, SUBJ, (OBJ)} & SS & co-reference \\
\hline & & DS & non-coreference \\
\hline \multirow[t]{2}{*}{Advanced} & \multirow[t]{2}{*}{T/A/M, SUBJ, (OBJ)} & SS & co-reference \\
\hline & & DS & SUBJ, non-coreference (following SUBJ) \\
\hline \multirow[t]{2}{*}{Skou} & \multirow[t]{2}{*}{T/A/M, SUBJ, (OBJ)} & SS & T/A/M, SUBJ, (OBJ), co-reference \\
\hline & & DS & T/A/M, SUBJ, (OBJ), non-coreference \\
\hline
\end{tabular}

The morphosyntactic options available to a Skou speaker to describe clausal junctures in the first order (that is, without recourse to serial verb constructions or to explicit conjunctions) are the following (described in terms of the way Skou speakers will initially describe them):
```

=pa subject of the first clause is the same or different as the subject of the
following clause, and there is little change in temporal reference;
=ko the temporal reference of the first clause significantly precedes that of
the second clause, or the subject of the first clause is not the same as
the subject of the following clause;
=te the temporal reference of the first clause significantly precedes that of
the second clause;
(Ø)
either temporal reference or participant reference of the two clauses
match.

```

One of the more basic use of the switch reference system can be illustrated in the following minimally different set of sentences, each using a different linking strategy from the four described above. Any implications of differences in coordination versus subordination that are implied from the English translations should be ignored. The sentence with an unmarked clause boundary is the one with the greatest amount of ambiguity. Seen from another perspective, the morphological unmarkedness or the clause juncture is mirrored in the semantic underspecificity of the linking.

Examples of the contrasts encoded by these three basic marked clause linking strategies, as well as the fourth alternative which is morphologically unmarked, are given in the following sentences.
(99) Hòe pe=tue, Theo ke=k-ang.
sago 3SG.F=3SG.F.do Theo 3SG.NF=3SG.NF-eat
'She cooked the sago, (and) Theo ate (it).'
(also potentially interpretable as: ‘Theo ate the sago that she cooked.', but this lacks the demonstrative that would make the relative clause interpretation unambiguous see 8.3 for more details on relative clauses)
(99) Hòe pe tue \(\boldsymbol{k o}\), Theo ke kang.
\(=\mathrm{OBV}\)
'She cooked the sago, and then Theo ate (it).'
(Implication: a longer time elapsed between the cooking and the eating)
(99) Hòe pe tue pa, Theo ke kang.
=INSTR
'As she cooked the sago, Theo ate (something).'
(Implication: there is no period of elapsed time between the cooking and the eating)
Hòe pe tue te, Theo ke kang. 3.come
'As soon as she had cooked the sago, Theo ate (it).'
(Implication: a longer time elapsed between the cooking and the eating)
The switch reference system is also used in constructions that in other languages of the New Guinea region would be formed with serial verb constructions, but which in Skou use overt switch reference marking: \({ }^{68}\)

Naké nì=ká=ko ke=wang.
dog \(1 \mathrm{SG}=\) hit=OBV \(3 \mathrm{SG} . \mathrm{NF}=\) die
'I killed the dog.'
It should be noted that in the sentence above the verbal agreement on both verbs would make it clear, regardless of the presence of switch reference marking or not, that the subject of 'hit' is not the same person as the subject of 'die'. Nonetheless, it is ungrammatical to use the =pa marker, or to omit any overt marker of switch reference:
\[
\begin{array}{cll}
\text { * naké } & \text { nì=ka=pa } & \text { ke=wang }  \tag{99}\\
\text { dog } & \text { 1SG=hit=INSTR } & \text { 3SG.NF=die }
\end{array}
\]
* naké nì ka (ke) wang.

While the construction above requires the use of an overt switch reference marker, \(=k 0\), it is true that in many other cases clauses may be simply conjoined, as has been seen in (99). Other examples of this include the following:
\begin{tabular}{lll} 
K óeng & nì=k-ang & ka \\
tooth & \(1 S G=1\) SG-eat & NEG
\end{tabular}
'I ate it all up.'
(that is, 'I ate it and then it didn't exist.')
(note the use of kóeng 'tooth' as a pleonastic object, where we might otherwise, in the absence of a lexically-specified nominal eaten thing, expect to see ya 'thing')

68 This is identical to Oirata (de Josselin de Jong 1937, Donohue and Brown 1999), in which switch reference forms are also used for this construction:

(99) \(\mathrm{Te}=\mathrm{a}\) hòe te=t-í ka

3PL=PROM sago 3PL=3PL-fell.PL NEG
'They chopped (down) all the sago trees.'
(that is, 'They felled the sago trees such that there were no more trees (that had not been chopped)

In the next example the same referential argument is indexed on the two verbs of the sentence by different agreement marking, but this does not affect the ability of the clauses to appear without any overt marking of conjunction.
(99) Fu nì ke=ká e nì pe=fí. rain 1SG 3SG.NF=hit be 1SG 3SG.F=meet 'The rain soaked me to the skin.'

Having established the range of use of the switch reference morphology, both the situations in which the markers can occur and some examples of complex sentences in which switch reference marking is not found, we shall now examine various issues to do with switch reference as they appear in Skou, xxxxx

\subsection*{19.5.1 Reference-tracking functions of the switch reference system}

Sequences of two clauses in which the subjects of both clauses have the same values for person, number and gender (that is, the subjects of both clauses are either 3SG.NF, 3SG.F or 3PL) are potentially ambiguous, as the English sentence in (99) illustrates. In this sentence the reference of the pronoun in the second clause, she, is ambiguous: it can potentially refer to either Tara or Molly in the preceding clause.
(99) Tara saw Molly, and then she left.

These sorts of sentences are disambiguated in Skou by the marker of switch reference on the verb. The following two sentences are identical except for the choice of switch reference marking on the first verb, and as a result of this choice the interpretation of the sentence as a whole is in each case completely unambiguous.
(99) Theo Hans ke=ká=ko, ke=moe ti

Theo Hans 3SG.NF=hit=OBV 3SG.NF=return 3SG.NF.go house
'Theo hit Hans, and then he \((\) Hans \()\) went home.'
(99) Theo Hans ke=ká=pa, ke=moe ti

Theo Hans 3SG.NF=hit=INSTR 3SG.NF=return 3SG.NF.go house
'Theo hit Hans, and then he \({ }_{(\text {Theo })}\) went home.'
Clearly in these sentences the function of the morphemes =pa and =ko is to mark the coreference or lack thereof of subject between the two clauses. If, however, the agreement marking on the verb is different in the two clauses, the same morphemes may be used to mark the temporal relationship between the clauses. Compare the sentences above with the pair below, which have the same instrumental marker at the end of the first clause, but which can show different reference across the clauses, allowing either the same or different subject readings, made clear by the use of the verbal agreement.

Lynch (1994) discusses a similar construction in Tok Pisin, arguing that it is still a serial verb construction despite the presence of an apparent marker of cosubordination. Foley (2004) argues that this is best treated as a combination of two clauses.
Theo è-ke-ké=ke ke=láng=pa,
Theo wife-3SG.NF.DAT-3SG.NF.GEN=3SG.NF.DAT 3SG.NF=hit=INSTR
ke=moe ti pá.
3SG.NF=return 3SG.NF.go house
'Theo hit his wife, and (then) he went home.'
Theo è-ke-ké=ke ke=láng=pa,
Theo wife-3SG.NF.DAT-3SG.NF.GEN=3SG.NF.DAT 3SG.NF=hit=INSTR
pe=moe te pá.
3SG.F=return 3SG.F.go house
'Theo hit his wife, and straight away she went home.'

With the obviative marker =ko both possibilities for coreference are attested where the pronouns are compatible with the readings, but there is more likely, particularly when the subjects are the same, to be a greater gap in time between the events of the first clause and the events of the second.
(99) Theo è-ke-ké=ke ke=láng=ko, ke=moe ti pá.
'Theo hit his wife, and then later he went home.'
Theo è-ke-ké=ke ke=láng=ko, pe=moe te pá.
'Theo hit his wife, and then later she went home.'
\(O R\) 'Theo hit his wife, and she went home.'
The compatibility of the obviative marker with either of the core arguments in the preceding clause being coreferential with the subject of the following clause can be seen in the following sentence, in which both the arguments of the first clause are non-feminine. There is a very strong preference for interpreting the subject of the second clause as not being coreferential with the subject of the first.
\begin{tabular}{lll} 
Theo ke & Paulus & ke=ká=ko
\end{tabular}\(\quad\) ke=moe

It is thus clear that the same morphological markers are used to monitor either same versus different subject in the two clauses, or to monitor same versus different temporal setting. There is some latitude in their use, but the main principle concerns the question of whether the subject marking morphology on the two verbs is in itself sufficient to distinguish the intended reference of the clauses.

We can group these three different morphological patterns in two arrays. In the first of these tables we can see the patterns that pertain when the verbal agreement for subject makes the reference of the two verbs clear regardless of the presence or absence of switch reference marking.

Table 175. Time and subject disjunctions: agreement morphology does disambiguate
\begin{tabular}{lllc}
\hline \hline & & \multicolumn{2}{c}{ Subject } \\
& & Same & Different
\end{tabular}

The second table shows the patterns found when the verbal agreement on the two verbs does not disambiguate, that is, when both arguments share the same pronominal features.

Table 176. Time and subject disjunctions: agreement morphology does not disambiguate
\begin{tabular}{llcc}
\hline \hline & & \multicolumn{2}{c}{ Subject } \\
& & Same & Different
\end{tabular}

Comparing these two tables, we can see that the top left and bottom right cells show the same options for switch reference coding: when both the temporal reference and argument reference are the same, or different, then the choice of switch reference marking is unambiguous. The differences come when one of these factors is the same, and the other one different. When there are no morphological cues to disambiguate the reference of the subject, then the functions of =pa and =ko are purely to indicate the identity or lack of identity of the subjects in the two clauses; the temporal reference does not influence the choice of marker.

On the other hand, when the agreement marking on the verbs is sufficient to disambiguate the reference of the subjects in the two clauses, we then find that non-coreference of subjects is also be marked by the use of = pa; in this function it can only be interpreted as marking same reference for the temporal sequencing in the two clauses: =pa may be used with non-identical subjects only if the time reference is identical, and not when there is a time gap between the two clauses. If the time reference is different, then we see that for those clauses with agreement marking that completely disambiguates the reference of the clauses, there is a choice in the switch reference marker employed when the subject is the same in both clauses: since the agreement morphology is already sufficient to determine the identity of the subjects, the obviative switch reference marker \(=k 0\) is now, optionally, used to show the non-identity of the time reference.

From these observations we can conclude that the primary function of the switch reference markers is to track the identity or non-identity of the subjects of two adjacent clauses. This is not simply a function of the switch reference mechanism, but rather is a stipulation placed on the whole clause, which me may state in terms of a constraint to maximally identify subject. This is reflected in the domain of the verbal agreement system in multiple indices for subject that appear on the verb: the uniquely-identifying proclitic, in addition to the fossilised consonantal prefix that is found in two-thirds of all verbs, and then the additional possibility of vowel alternations marking some features of the subject as well. Only when the subject has been clearly identified and indicated can the switch reference system be used to mark identity or nonidentity of the other highly salient point of reference in the clause, namely the domain of time. This explains the difference in marking between sentences which do and do not adequately differentiate subjects by means of agreement morphology, and the variation in the use of switch reference morphology in those clauses that do adequately mark subject on the verb.

\subsection*{19.5.2 U naccusativity and switch-reference}

Another point needs to be addressed here, and that is to do with the exact bounds of the category 'subject' that is being monitored in the switch reference system. Other works dealing
with the phenomenon of switch reference (see, for instance, Reesink 1983) has pointed out that the categories monitored in a switch reference system are not always necessarily the same ones that form groups in, for instance, verbal agreement systems.

Although we have seen that the obviative =ko may be used when there is either a different subject or a different temporal sequence, there are cases in which this marker is used even when the time reference and the identity of the sole core participant are the same. Consider the following sentence:
(99) Tánge napì=ko, nì=ku i re.
leg slip=OBV 1SG=fall lie.down ro
'I slipped, and so fell.'
In this example the morphosyntactically encoded subject of the first clause is tánge 'leg', which is inalienably possessed by the subject of the second clause, nì 1SG - there is no separation in the real-world between 'leg (possessed by self)' and 'self'. Nonetheless, the language prefers the coding tánge napì '(I) slipped (leggily).' over nì=napì 'I slipped.', following a New Guinea areal preference for the coded subject of a clause to be either volitional or the nonagentive subjects of resulting states; this means that the subject of the first clause is listed as being different to the second clause, and so the obviative \(=k 0\) is used to link the two clauses together. Compare to the following sentence, in which the same referent-tracking =pa is (and, without significant time difference between the two clauses, must be used) instead, the conditioning factor being the semantic nature of the verbs involved.

\section*{XXXXXXXXXXXXXX}

This implies that the notion of 'same' and 'different' subject, as encoded in the switch reference system described here, is a grammatical one, and not simply a pragmatic or discoursal one. If the latter were the case, then we would expect clauses such as (99) to be encoded with =pa, the same-subject marker, rather than =ko. From (99) we can see that the switch reference marking, when used to monitor the identity of the subjects of two conjoined clauses, monitors the identity or non-identity of the category that is marked on the verb as 'subject'.

What sorts of predicates show this sort of syntactic behaviour? This is a crucial question, since it and it alone can tell us where, in Skou, the cut-off point is that marks the different neutralisations of semantic roles into the categories that are treated as morphosyntactic units by the grammar. The following division emerges:

Table 177. xxxxxxxx

\section*{XXXXXXXXXXX}

\subsection*{19.5.3 Inclusion of members}

The switch reference system of a language often shows interesting behaviour when the conjunction of clauses involves not simply a choice of which of more than one possible referents are being tracked, but deals with a situation in which the scope of one of the arguments in one clause includes one or both of the arguments in the other clause. For instance, in the following English sentence, the scope of the pronoun in the second clause includes the subject of the first clause, but is not limited to it, as it includes the object of the first clause as well (at least in its least marked interpretation).
(99) When I went to Scotland Island I saw Robert, and we had a walk about the place.

In Skou, with an overt monitoring system that indicates the amount of referential overlap between two clauses, we find that the resolution of the question of which of the switch reference markers to use in examples such as that in (99) depends on the person of the different arguments in the first clause, particularly whether or not the arguments are speech-act participants (first or second person) or not (The term 'speech act participant' is synonymous with 'Local person', used in other traditions). The Skou translation of (99) that was offered to me is shown in (99)', where we can see that the same-reference marker =pa is used.
```

(99) Nì=re Skotlandia piítu rángkue Robert nì=fue=pa, lòeng
$1 \mathrm{SG}=\mathrm{go}$ Scotland island time Robert $1 \mathrm{SG}=$ see $=$ INSTR path
ne=n-a ne ti fue a.
1PL=1PL-walk 1PL.be 1PL.do that
'When I went to Scotland island I saw Robert, and we walked about.'

```

Despite the preference for choice of marker, considerable variation is tolerated for most combinations of persons being conjoined. Table 178xx shows the possibilities for different persons being conjoined into an inclusory argument functioning as the subject of the second clause.

Table 178. Conjoining inclusory subjects and switch reference possibilities
\begin{tabular}{cccc}
\hline \hline Subject of clause \(_{1}\) & Object of clause \({ }_{1}\) & Switch reference markers \\
\hline \(1 / 2_{(\mathfrak{l})}\) & \(1 / 2_{(\mathfrak{j})}\) & \(=\mathrm{pa}\) & \(*\) \\
\(1 / 2_{(\mathfrak{i})}\) & \(3_{(\mathfrak{j})}\) & \(=\mathrm{pa}\) & \(\#\) \\
\(3_{(\mathrm{i})}\) & \(1 / 2_{(\mathfrak{j})}\) & \(=\mathrm{pa}\) & \(=\mathrm{ko}\) \\
\(3_{(\mathrm{i})}\) & \(3_{(\mathfrak{j})}\) & \(=\mathrm{pa}\) & \(=\mathrm{ko}\) \\
\hline \hline
\end{tabular}

Example sentences illustrating these different possibilities are shown in the following pairs. Firstly, we can see that when both the conjuncts are speech act participants, they must be joined with the same reference marker = pa; no variation in the switch reference markers is permitted.
\(\mathrm{A}_{1 / 2}+\mathrm{P}_{1 / 2} \rightarrow\) SUBJ: \(=\) pa possible,\(=\) ko ungrammatical
Pí nì=li mè=pa ne=moe.
speech \(1 \mathrm{SG}=\mathrm{do} \quad 2 \mathrm{SG}=\mathrm{INSTR} \quad 1 \mathrm{PL}=\) return
' \(\mathrm{I}_{\mathrm{i}}\) spoke to \(\mathrm{you}_{\mathrm{j}}\), and then \(\mathrm{we}_{\mathrm{i}+\mathrm{j}}\) returned.'
(99) * Pí nì li mè ko ne moe.

When one of the conjuncts is third person the situation is more complex. If the subject of the first clause was a speech act participant, then the same subject marker is favoured; the different reference marker is possible, but not favoured. If it is permitted (and speakers vary in their judgements on the acceptability of this, both between speakers and from the same speaker at different times), the use of the obviative rather than the instrumental marker here shifts the informational focus on to the time gap between the clauses.
\[
\begin{align*}
& \mathrm{A}_{1 / 2}+\mathrm{P}_{3} \rightarrow \text { SUBJ: }=\text { pa possible, }=\text { ko disfavoured } \\
& \text { Pí ne=li ke=pa ne=moe. }  \tag{99}\\
& \text { speech } 3 \mathrm{SG} . \mathrm{NF}=\mathrm{do} \quad 1 \mathrm{SG}=\mathrm{INSTR} \quad 1 \mathrm{PL}=\text { return } \\
& \text { ' } \mathrm{We}_{\mathrm{i}} \text { spoke to } \mathrm{him}_{\mathrm{j}} \text {, and then } \mathrm{we}_{\mathrm{i}+\mathrm{j}} \text { returned.' }
\end{align*}
\]
(99)

> \# Pí ne li ke ko ne moe.
> 'We \(\mathrm{e}_{\mathrm{i}}\) spoke to him \(\mathrm{m}_{\mathrm{j}}\), and then later on \(\mathrm{we}_{\mathrm{i}+\mathrm{j}}\) returned.'

If, however, the subject of the first clause is third person and it is the object of this clause that is the speech act participant, then either the same reference or different reference marking are possible. There is no question as to the acceptability of the sentences, and there are no reported differences in interpretation or informational emphasis between the two possibilities. Note also that the use of a generic nonsingular or a specifically dual pronoun in the second clause does not affect judgements.
\[
\begin{equation*}
\mathrm{A}_{3}+\mathrm{P}_{1 / 2} \rightarrow \text { SUBJ: }=\text { pa and }=\text { ko both possible } \tag{99}
\end{equation*}
\]
\begin{tabular}{llll} 
Pí & ke=li & \(n i ̀=p a\) & \(n e=\) moe. \\
speech & 3SG. \(\mathrm{NF}=\mathrm{do}\) & \(1 \mathrm{SG}=\mathrm{INSTR}\) & \(1 \mathrm{PL}=\) return \\
'He spoke to me , and then we returned.'
\end{tabular}
(99) Pí ke li nì ko amanè moe.
(99) Pí ke li nì ko ne moe.
(99) Pí ke li nì ko amanè moe.

The following sentences show that this variation is not simply a first person phenomenon, with sentences equivalent to those above except for the substitution of a second person pronoun for the first person one still being regarded as acceptable, with the same range of latitude as regards the use of switch reference morphology.
(99) Píke li mè pa e / enape moe.
'He spoke to you, and then you \({ }^{\text {PL }}\) returned.'
(99) Píke li mè ko e/ enape moe.
'He spoke to you, and then you \({ }_{\text {DU }}\) returned.'
When both the conjuncts are third person, then again either same or different reference markers are possible, with no reported differences in meaning.
\(\mathrm{A}_{3}+\mathrm{P}_{3} \rightarrow\) SUBJ: \(=\) pa and \(=\) ko both possible
\begin{tabular}{llll} 
Pí & ke=li & pe=pa & te= moe. \\
speech & 3SG. \(\mathrm{NF}=\mathrm{do}\) & 3SG. \(\mathrm{F}=\mathrm{INSTR}\) & 3PL=return \\
'He spoke to me, and then we returned.'
\end{tabular}
(99) Pí ke li pe ko enake te moe.
(99) Pí ke li pe ko enake te moe.

We can summarise the data seen in this section as follows:
- when the subject and object are both local persons, inclusory reference must be marked with the same reference form using = pa;
- when the first subject is higher in animacy than the object, inclusory reference is most typically marked with the same reference form using =pa;
- when the first subject is a non-local person, then inclusory reference can be marked with either the same reference form using =pa or the different reference forms using \(=k 0\).

Having examined some of the restrictions that are imposed on the switch reference system by the elements of the clauses that it is used to bind, we can now move on to looking at some of the functions of this system.

\subsection*{19.5.4 The use of the switch reference system}

We have examined switch reference in Skou from a highly reductionist perspective so far, and in this section we shall see what uses it is put to in real (and therefore messy) speech, and in slightly modified ('cleaned-up', following speakers' normative judgements of 'correctness') extracts from spontaneously-occurring speech. The extracts in this section are generally longer than a simple two clause conjunction, with the shorter examples illustrating particular possibilities.

The function of the clause marking strategies in real discourse where the subject marking is sufficient to disambiguate the reference, is illustrated in the following short passage, which shows all the possibilities of marking.
\[
\begin{align*}
& \text { [1 Rángkue tí nì=hí ]=pa, [2 ó bápáli hóe }  \tag{99}\\
& \text { time sea 1SG=wash=INSTR wave big landwards } \\
& \text { toe ], [3 ró-nì=ne ti } \quad \text { ke=k-á } \boldsymbol{a} \boldsymbol{a} \text {, } \\
& \text { 3.come skin-1SG.GEN=1SG.DAT 3SG.NF=3SG.NF-take 3SG.NF.go=INSTR } \\
& {[4 \text { nì= yá }]=k o, \quad[5 \text { nì=loe }] \text {. }} \\
& 1 \mathrm{SG}=\text { search=OBV } \quad 1 \mathrm{SG}=\text { get.PL } \\
& \text { 'When I was washing in the sea, a big wave came and washed away my } \\
& \text { clothes, but I looked for them, and managed to get them back.' }
\end{align*}
\]

We can examine the clause-final particles and catalogue the different uses they exhibit in (99) in table 179xx.

Table 179. Patterns for marking topic discontinuities in (99)
\begin{tabular}{cccc}
\hline \hline Clause & Reference of subject & Time sequencing & linker used \\
\hline 1 & \(1 \neq 2\) & same & \(=\) pa \\
2 & \(2=3\) & same & \(\emptyset\) \\
3 & \(3 \neq 4\) & same & \(=\) pa \\
4 & \(4=5\) & different & \(=\) ko \\
5 & - & final & - \\
\hline \hline
\end{tabular}

The switch reference system is more likely to be used to monitor same versus different subject, rather than time reference, when the participants are both capable of performing the predicate, regardless of the presence of subject agreement markers on the verbs. This can be seen in the following example from actual discourse, in which the functions of the two markers are reversed compared to their appearance in (99):
\[
\begin{align*}
& \text { [1 Ke=angku=fue a pí li-li ]=pa } \quad[2 \text { ke=li }]=\boldsymbol{k} \boldsymbol{a} \text {, }  \tag{99}\\
& \text { 3SG.NF=child=that speech do-RED=INSTR 3SG.NF=do=OBV } \\
& \text { [3 nì ráue nì=há i]. } \\
& \text { 1SG laugh 1SG=stand be } \\
& \text { 'That child was talking, and he spoke, and then I laughed.' }
\end{align*}
\]

Compare the summary in table xx 180 for this sentence with the choices that were made in (99), shown in table xx179. Particular attention should be paid to clause 4 in table 179 xx and
clause 1 in table xx180, both of which have same subject and different time sequencing, and clause 3 in table 179 xx compared to clause 2 in table 180 xx , which both show different subjects in the same temporal sequence. The two extracts show reversed marking of clause linkage, however.

Table 180. Patterns for marking topic discontinuities in (99)
\begin{tabular}{cccc}
\hline \hline Clause & Reference of subject & Time sequencing & linker used \\
\hline 1 & \(1=2\) & different & \(=\) pa \\
2 & \(2 \neq 3\) & same & \(=\) ko \\
3 & 3 & final & - \\
\hline \hline
\end{tabular}

Another example shows us that involuntary state predicates show a pattern that is expected from a survey of New Guinea languages, namely that the switch reference system monitors the topicality of arguments across clauses, and not the strict identity of the arguments. This is illustrated by the following clauses, which differ only slightly. In the first clause we can see that the clause marking the return home is separated from the sickness clause with an obviative marker, just as the sickness clause is separated from the departure clause by an obviative marker, even though the referent is in all cases the same.
(99) [DEPARTURE Nì=re te=Óeti ]=ko, [sickness nòe è ]=ko \(1 \mathrm{SG}=\) go \(3 \mathrm{PL}=\) Wutung=OBV body sick=OBV [returning nì=moe toe].

1SG=return come
'I went to Wutung, but (while I was there) I got sick, and so then came back home.'

A chart showing the different coreference conditions, along with the temporal sequencing, between the different clauses in (99) is shown in table 181xx.

Table 181. Patterns for marking topic discontinuities in (99)
\begin{tabular}{cccc}
\hline \hline Clause & Reference of subject & Time sequencing & linker used \\
\hline 1 & \(1= \pm 2\) & different & \(=k 0\) \\
2 & \(2= \pm 3\) & different & \(=k 0\) \\
3 & 3 & final & - \\
\hline \hline
\end{tabular}

Here the different time references of the different clauses guarantees that the switch reference \(=k 0\) must be used, regardless of the status of the subject reference across the clauses. It is possible for a different marker to be used to separate the second clause from the third, if the temporal sequencing is closer. In (99)' we can see an nearly identical clause, but with a different switch reference marker separating the second from the third clauses. The chart explicating the information in this clause is shown in table 182xx.
(99)' Nì=re te=Óeti=ko, nòe è=pa nì=moe toe.
\(1 \mathrm{SG}=\mathrm{go} \quad 3 \mathrm{PL}=\) Wutung=OBV body sick=INSTR \(1 \mathrm{SG}=\) return come
'I went to Wutung, but (while I was there) I got sick and so then came straight back home.'

Table 182. Patterns for marking topic discontinuities in (99)'
\begin{tabular}{cccc}
\hline \hline Clause & Reference of subject & Time sequencing & \\
\hline 1 & \(1= \pm 2\) & different & \(=\) ko \\
2 & \(2= \pm 3\) & same & \(=\) pa \\
3 & 3 & final & - \\
\hline \hline
\end{tabular}

Compare these last few example sentences with the following pair, in which the event in the second clause, performing a traditional singing and dancing festival, cannot pragmatically be continued into the temporal scope of the final clause, and so the use of = pa is ungrammatical, or at best highly marked. In this case there must be a different temporal setting in the third clause from that in the second, and so this must be obligatorily coded with the obviative marker.
\[
\begin{align*}
& \text { Nì=re te=Ó eti=ko, lí nì=li=ko nì=moe toe. }  \tag{99}\\
& 1 \mathrm{SG}=\mathrm{go} \quad 3 \mathrm{PL}=\text { Wutung }=\mathrm{OBV} \text { dance } 1 \mathrm{SG}=\mathrm{do}=\mathrm{OBV} \text { 1SG=return come } \\
& \text { 'I went to Wutung, and then danced, and later came back.' } \tag{99}
\end{align*}
\]
* nì=re te=Ó eti=ko, lí nì=li=pa nì=moe=toe

Note that for the nonagentive passive involving mòng wí 'be hit, be affected', it is the undergoer subject that is monitored by the switch reference system, not the notion of 'actor'. In the first example below we can see that coordination with the switch reference marker = pa, indicating the same subject, is possible, but that the use of the obviative \(=k 0\), which is found with either different subjects or different times, is not grammatical.
(99) Nì mòng nì=wí=pa nì=moe ha tà.

1 SG wound \(1 \mathrm{SG}=\) get. \(\mathrm{F}=\mathrm{INSTR} \quad 1 \mathrm{SG}=\) return walk running
'I was hit, and then I ran home.'
\[
\begin{align*}
\text { * nì mòng nì wí } & =\text { ko nì moe ha tà }  \tag{99}\\
& =\text { OBV }
\end{align*}
\]

Compare this with the grammaticality of using \(=k 0\) with a semantically similar sentence with a fully transitive verb in the first clause:
\begin{tabular}{llll} 
Nì & ke=ká=ko & nì=moe & ha tà. \\
1SG & 3SG. NF=hit=OBV & 1SG=return & walk running \\
'He hit me, and then I ran home.' &
\end{tabular}

The use of the instrumental = pa, the erstwhile proximate marker, to conjoin clauses with either the same subject or with different subjects can be seen in the following sentences. In the first sentence the temporal setting may include the sitting and the speaking at the same time, or in close sequence. In the second clause, however, the only possible interpretation is that the third party was speaking as the first person sat down.

Proximate clause linking with \(=\mathrm{pa}\), same subject
Nì=ta hung=pa húhú nì=li.
\(1 \mathrm{SG}=\) sitting sit=INSTR story \(1 \mathrm{SG}=\mathrm{do}\)
'I sat (down) and spoke.' / 'I sat down while I spoke.'
Proximate clause linking with \(=\mathrm{pa}\), different subject
Nì=ta hung=pa ke húhú ke=li.

1SG=sitting sit=INSTR 3SG.NF story 3SG.NF=do
'I sat (down) as he spoke.'

A similar pair of examples below show that the obviative, too, is eligible to mark two clauses sharing either the same subject or having different subjects, but if they share the same subject then they must be interpreted as having no temporal overlap, while if there are different subjects pertaining in the two different clauses the interpretation of temporal sequencing is less strict.

Obviative clause linking with \(=k 0\), different time reference
\[
\begin{align*}
& \text { Nì=ta hung=ko jópa }  \tag{99}\\
& \text { 1SG=sitting sit=OBV a.while } \quad \begin{array}{c}
\text { húhú } \\
\text { story }
\end{array} \\
& \text { ‘I sat (down) and after a while I spoke.' } \\
& \text { 1SG=do }
\end{align*}
\]

Obviative clause linking with \(=k 0\), same or overlapping time reference
\[
\begin{array}{ll}
\mathrm{Ni}=t a & \text { hung }=\mathrm{ko} \tag{99}
\end{array} \quad \text { ke } \quad \text { húhú } \mathrm{ke}=\mathrm{li} .
\]

An example of the verb 'go' used in its unmarked (3SG.NF) form, without displaying agreement for the non-3SG.NF subject that is marked on the main verb that precedes it, can be found in the following examples.
Nì=ta hung=te \(\quad\) húhú \(\quad\) nì \(=\mathrm{li}\).
1SG=sitting sit=go \(\quad\)\begin{tabular}{l} 
story \\
'I \\
'I sat (down) and straight away spoke.
\end{tabular}
\begin{tabular}{llll}
\(\mathrm{Ni}=\) ta hung=te & ke & húhú & \(\mathrm{ke}=\mathrm{li}\). \\
1SG=sitting sit=go & 3SG.NF & \begin{tabular}{l} 
story
\end{tabular}, \\
3SG.NF=do \\
'I sat (down) and straight away spoke.'
\end{tabular}

Switch reference forms are also used productively to encoded subordinate temporal clauses in Skou. The following examples show how the same/different reference functions of the markers \(=p a\) and \(=k 0\), with reference referring to temporal overlap, can be used to mark subtle distinctions in temporal coding.
Nì=há=ko rángkue áling wí.
1SG=travel=OBV hour one 3SG.F.pass
'I travelled until one hour had passed.'
\begin{tabular}{llll} 
Rángkue & áling & wí=pa, & nì=há-há. \\
hour & one & 3SG.F.pass=INSTR & 1SG=travel-RED
\end{tabular}
'One hour passed, and then I set out.'
\begin{tabular}{lllll} 
Nì=hóe=ko & rángkue áling & pa=pa, & nì=há-há. \\
\(1 S G=w a i t=O B V\) & hour & one & INSTR=INSTR & 1SG=1SG.travel-RED
\end{tabular}
'I waited for one hour, and then I set out.'
\[
\begin{align*}
& \text { Nì=hóe=ko rángkue áling hí=pa, nì=há-há. }  \tag{99}\\
& \text { 1SG=wait=OBV hour one enter=INSTR } \quad \text { 1SG=travel-RED } \\
& \text { 'I waited for one hour, and then I set out.' }
\end{align*}
\]

\section*{XXXXXXXXXXXXXXXXXX}

An elaboration of this use of an ergative pronoun allows adjectival modification:
(99)
\begin{tabular}{|c|c|c|c|c|}
\hline Te Téme & ke=bà & áling & ke=M áwo & ke=ká=ko \\
\hline Nafri & 3SG.NF=person & one & 3SG.NF=Skou Mabo & 3SG.NF=hit=OBV \\
\hline \multicolumn{5}{|l|}{ke=wung.} \\
\hline \multicolumn{5}{|l|}{'One of the Nafri men hit a Skou Mabo man, and heskou / *Nafri died.'} \\
\hline
\end{tabular}

XXXXXXXXX

\subsection*{19.5.5 Post-facto switch reference}

Sometimes the switch reference system is used to mark a verb that appears finally in the sentence, not medially. In these instances the verbs appear to be placed as 'afterthoughts', adding more information that, properly speaking, would have been coded earlier in the clause. The following sentence is an example of this, showing a 'medial' verb form appearing following the goal in the clause.

Ke=ti bàme, nì=la=pa.
3SG.NF=3SG.NF.go village \(1 \mathrm{SG}=\) accompany=INSTR
'He went to the village, and I accompanied him.'
A more canonical way to encode these meanings might be the following:
(99) Ke nì=la=pa ke=ti bàme,

3SG.NF 1SG=accompany=INSTR 3SG.NF=3SG.NF.go village
'I accompanied him (when) he went to the village.'

\section*{dxxxxyxxxxxxx}

\subsection*{19.4 Other coordination strategies in discourse}

The switch reference system is somewhat all-pervasive in linking clauses in Skou, but it is not, of course, the final word on discourse strategies. Such a topic is beyond the space that can be allocated to it here, but some comments can, and will, be made about some of the more prominent strategies employed by Skou speakers when constructing discourse. Further examples of discourse can of course be found in appendix 4, where a variety of texts representing a range of genres have been recorded.

\subsection*{19.4.1 Tail-head linkage}

Tail-head linkages are a common discourse strategy in languages of the New Guinea area (Longacre 1972, 1985). A tail-head linkage involves the repetition of the final part of one sentence (the 'tail') as the start ('head') of the following one; in Skou, and the other languages of New Guinea for which this author has personal experience, the repeated portion is invariably marked by a distinct intonation contour, and is clearly separated from the rest of the sentence. We may represent the tail-head pattern schematically as shown in (99).

Tail-head linkage
(99) [Sentence \(1 \ldots \mathrm{X}\) Y Z][sentence 2 Z , A B ...]

A good example of a tail-head linkage sequence can be found in the following textual extract. The tail and head are shown in bold, and in this extract the tail of the first sentence is exactly repeated as the head of the next.
\begin{tabular}{cclll} 
Ne=r-óe & hì & wá=ko, & ne & núng \\
1PL=1PL-get.PL & go.down & carrying.basket=OBV & 1PL & k.o.net \\
ne=ne=ko & ne, & móe & ne=r-óe-róe=pa, & \\
1PL=1PL.be=OBV & 1PL & fish & 1PL=1PL-get.PL-RED=INSTR
\end{tabular}
ne=r-óe \(\quad n-a \quad\) moe ne bàme.
1PL=1PL-get.PL 1PL-walk return 1PL.go village
'We put them in the basket, and then, we go back to the nets, and then we, catch some more fish, and we take them back to the village.'

'When we've taken them back to the village, we put them down, and straight away, with the children, we eat them.'
In addition to the formula shown in (99), another alternative is found, widely attested in the languages of New Guinea (eg., Roberts 1987, van Kleef 1988). In this strategy the previous final predicate or series of predicates is summed up by a use of the verb 'do'. This is shown schematically in (99), with examples in (99) and (99).

Tail-head linkage II
(99) [sentence \(1 \ldots \mathrm{X}\) Y Z ] [sentence 2 'do', A B ...]
(99) \(\mathrm{Te}=\) Ó eti=ing a héfèng te=tí.
\(3 \mathrm{PL}=\) Wutung=the good \(\quad 3 \mathrm{PL}=\) dance
Te=ti=ko, te=ing a=pa ne=n-ang.
3 PL=3PL.fo=OBV 3 PL=the=INSTR \(\quad 1\) PL=1 1 LL-eat=INSTR
'And the Wutungs danced well. Having done that, we ate with them.'
(99)
\begin{tabular}{llll} 
Te \(e r-1\) í \(=k 0\) & te=me & t-o & bàme. \\
3PL=3PL-PL.get=OBV & 3PL=PL.return & 3PL=seawards & village
\end{tabular}

Ing a te=ti=ko, te=me=pa
the \(\quad 3 \mathrm{PL}=3 \mathrm{PL} . f \mathrm{fo}=\mathrm{OBV} 3 \mathrm{PL}=\mathrm{PL}\).return \(=\mathrm{INSTR}\)
te \(=\mathrm{ti}=\) ing a \(\quad\) te \(=\) meng.
3PL=3PL.do=the \(\quad 3 \mathrm{PL}=\mathrm{PL}\). stay
'And they go it and, later, they went back to the village. And then having done that, having returned and, because they'd done that, they stayed there.'

Tail-head linkages with the verb 'do' are much less common than those in which the predicate of the preceding clause is repeated. In (99) we can see that the speaker vascillated between a 'do' coding and the use of the lexical verb.

\subsection*{19.4.2 Parallelisms and parallel contrasts}

Another frequently-occurring discourse strategy in Skou is the use of parallelisms in constructing a narrative. In this strategy a concept is repeated in different words, or slightly modified, or else the structure used to present one proposition is used to contrast with the
following related proposition. We may represent these with the schemas in (99) and (99). In the first, the first sentence is repeated with slight modification of one of its of meaning components. In the second structure the meaning components of the second proposition are different, but the structure in which they are presented is identical to that used in the first proposition.

\section*{Parallelisms}
(99) [proposition \(1 \quad \mathrm{X}\) Y \(\quad\) Z] [proposition \(\left.2 \mathrm{X} \quad \mathrm{Y}^{\prime} \quad \mathrm{Z}\right]\)

Parallel structures


The following example exemplifies both the use of parallelisms and the use of parallel structures in one stretch of narration. The parallelism in the first line is shown in bold; here two semantically close concepts are presented to emphasise the speaker's communicative content. In the second line the two propositions headed by Lópa and ung a we ing are contrasted, in identical verbless clauses. The repetition of ung a we ing in the next clause is an example of a tail-head linkage (see 15.3.5.2).


Some other examples are the following. In the first example, describing clan ownership of a stretch of beach, the speaker switches back and forth between the word fítong 'ground, land' and hángto 'sand' to refer to the area that she means.

Hendrik, fítong-nè=ne, [itu] hángto-nè=ne,
Hendrik ground-1PL.GEN=1PL.DAT [that] sand-1PL.GEN=1PL.DAT
fítong-nè=ne.
ground-1PL.GEN=1PL.DAT
'Me and Hendrik's ground, they're our sands, our land.'
This next example shows a clearly identical structure in each of the three clauses, namely an object followed by 'they chopped them all down'. An interesting development is the use of pragmatic markers (4.6) on the noun phrases that are used to build the parallelism, whereby the object NP in the first clause is unmarked, and in each of the subsequent clauses incrementally more pragmatically salient marking is found on the object.
\[
\begin{align*}
& \text { rí-pa ya=we te=pang=ko ka. Bí=ra }  \tag{99}\\
& \text { tree-stands thing=this } 3 \text { PL=chop. } \mathrm{PL}=\mathrm{OBV} \text { NEG flooring=also } \\
& \text { te=pang=ko ka, hòe=wò=ra, te=pang=ko ka, ... } \\
& \text { 3PL=chop. } \mathrm{PL}=\mathrm{OBV} \text { NEG sago=EMPH=also 3PL=chop. } \mathrm{PL}=\mathrm{OBV} \text { NEG } \\
& \text { '... they've chopped all the trees down until there aren't any left. The trees } \\
& \text { we use for flooring, too, they've chopped them all down, and even the } \\
& \text { sago stands, they're all gone, ...' }
\end{align*}
\]

Pragmatic marking of NPs in the parallel clauses of (99)
(99)'
\begin{tabular}{ll} 
i. \(\quad \mathrm{NP}\) & (rípa) \\
ii. \(\quad \mathrm{NP}=\mathrm{ra}\) & (bí) \\
iii. \(\quad \mathrm{NP}=\) wò \(=\) ra & (hòe)
\end{tabular}

Many instances of parallelisms are formed with Papuan Malay lexifying the second proposition, as can be seen in (99), in which the arrival of Peìngje wò a and the arrival of dong Yesus both refer to the same event, the appearance of the church in the Skou villages.

> Pe=ìngje=w(ò)=a [datang, dong Yesus datang sut-]=ka, 3SG.F=gospel=EMPH=PROM [come mob Jesus come already NE-]=NEG '(Now) the gospel, the Christians, have come, and they don't do it any more, .

Further examples of parallelisms can be found throughout the texts in appendix 4, from which the textual examples presented here have been drawn.

\section*{Appendix 1 Wordlists}

No lexicographic materials for the Skou language are available in general circulation, and it is unlikely that they will appear in the near future in a form that is accessible for most readers of this book. In order to partly counter this dearth of materials, I have assembled a basic wordlist for the language, arranged by semantic fields, as well as alphabetised Skou-English and English-Skou wordlists. More detailed lexicographic materials, being files of the community dictionary that is being trialed, can be downloaded from the website listed under 'updates' at the start of this book.

\section*{A1.1 Skou wordlist by semantic fields}

The following list of basic lexemes is given as a guide to the lexical diversity of the language, and as an aid to comparative work. It is not intended to be exhaustive, nor is it. It does nonetheless contain a good deal of material that has not been checked in the interests of making a record available to a wider audience, as the future of further lexicographic work on the language is doubtful.

The list has been arranged by semantic fields, and is intended to cover as much of a basic survey wordlist as possible, with these items appearing first within each semantic domain, followed by a selection of more specialised items. Verbs appear inflected for first person singular, with the prefix \(k\) - if the verb is one of those that take it. If this is the case, it has been flagged as not being part of the root. The entry for 'eat' is thus given as kang ( \(k-1 \mathrm{SG}\) ). Where known, the gender of a noun has been indicated, with feminine nouns marked by ' \(F\) ', and nonfeminine marked with ' NF '; verbs in all cases appear in the non-plural, non-feminine forms. All lexical items appear in the orthography that has been used in the bulk of this book (aside from the phonology chapter and the acoustic appendices).

Some of the material that appears here replicates that found in earlier chapters. The kinterms presented here are, of course, the same as those that have already been seen in chapter 9 , and similarly the pronouns are no different (and in fact less complete) than those already found in chapter 6. Nonetheless, in the interests of having an easy, and inclusive, section for reference purposes, giving a representative sample of the basic lexical material in Skou arranged by semantic fields, it has been repeated here.

The abbreviations used in the section on kinterms follow standard anthropological usage: C child, D daughter, e elder, F father, H husband, M mother, P parent, S son, Si sibling, Sp spouse, W wife, y younger, Z sister. These may be used in combinations such that each operator applies to the following term. As an examples of this, the gloss FZC for lálà(ne) indicates that the term can be used for a father's sister's child. Brackets show that the operators enclosed are optional. Hóeto may be used for either a sibling's spouse, SiSp, or a parent's
sibling's child's spouse, PSiCSp, in addition to referring to a spouse's sibling. Both of these references are subsumed under \((\mathrm{P})_{\alpha} \mathrm{Si}(\mathrm{C})_{\alpha} \mathrm{Sp}\), Finally, an asterisk outside the brackets indicates that the term inside the brackets is iterative, with at least one instantiation: tata \(\mathrm{C}(\mathrm{C})^{*}\) may be used for a grandchild, or a great-grandchild, or either sex.
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{3}{|l|}{A-Body parts} & \multicolumn{3}{|l|}{B - Human and kinterms} \\
\hline 1 & Head & ròebi & 1. & Man & (ke) bà \\
\hline 2 & Hair & ta & 2. & Woman & pe ueme \\
\hline 3. & Eye & Iúto & 3. & H & páng(ne) \\
\hline 4. & Ear & lóe & 4. & W & è(ne) \\
\hline 5. & Nose & há & 5. & M & ánì, má(me) \\
\hline 6. & Mouth & lángue & 6. & F & áì, re(me) \\
\hline 7. & Lip & pengro & 7. & SpM & là(ne) \\
\hline 8. & Tooth & kóeng & 8. & SpF, DH & ìne) \\
\hline 9. & Tongue & póeng & 9. & SW & tà (ne) \\
\hline 10. & Arm & nò & 10. & Firstborn & bahúe \\
\hline 11. & Elbow & nòruerue & 11. & Lastborn & bafá \\
\hline 12. & Finger & nòkangkang & 12. & twins & kulílong \\
\hline 13. & Fingernail & nòbi & 13. & orphan & batáko \\
\hline 14. & Breast & nó & 14. & eZ & pe=bahúe \\
\hline 15. & Back & koe & 15. & eB & ke=bahúe \\
\hline 15. & Stomach & húe & 16. & yZ & pe=bafàng \\
\hline 16. & Liver & xxxx & & & ke=bafàng \\
\hline 17. & Leg & tánge & 18. & Z & yá(ne) \\
\hline 18. & Knee & làngbi & 19. & B & yu(ne) \\
\hline 19. & Body hair & nòeta & 20. & PSiC & yu \\
\hline 20. & Skin & nòero & 21. & (P) \(\alpha_{\alpha} \mathrm{Si}(\mathrm{C})_{\alpha} \mathrm{Sp}\) & hóeto \\
\hline 21. & Blood & hì & & SpSi & \\
\hline 22. & Bone & é & 22. & FZC & lálà(ne) \\
\hline 23. & Flesh & nà & 23. & FeB, MeZH & tití \\
\hline 24. & Urine & hipong & 24. & FyB & kóko \\
\hline 25. & Faeces & hi & 25. & MB & wówó \\
\hline 26. & Body & nòe & 26. & MeZ, FeBW & tóeue \\
\hline \multirow[t]{4}{*}{} & Person & (ke) bà & 27. & MyZ & ánì pe bafàng \\
\hline & & & & PP, \(\mathrm{C}(\mathrm{C})^{*}\) & tata \\
\hline & & & & PPP & yaya \\
\hline & & & & C & ku \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline 31. Friend & bápá(ne) & 17. Leech & àli \\
\hline 32. Big man & ke=bari & 18. Crocodile & móenòeng \\
\hline & & 19. Cassowary & tángrùe \\
\hline C-Pronouns & & 20. Cuscus, rat & púlè \\
\hline & & 21. Fly & lúng \\
\hline 1. I & nì & 22. Hornbill & tángung \\
\hline 2. You & mè & 23. Cockatoo & tángna \\
\hline 3. He & ke & 24. Crowned & tángboe \\
\hline 4. She & pe & pigeon & \\
\hline 5. We (DU.EX) & amanè & 25. Eagle & tángé \\
\hline 6. We (DU.IN) & anake & 26. Frog & kíngue \\
\hline 7. We (DU.IN.F) & anape & 27. Fruit Bat & tángoeue \\
\hline 8. You (DU) & enake & 28. Tree kangaroo & púpúe, púru \\
\hline 9. You (DU.F) & enape & 29. Ant & loe \\
\hline 10. They (DU) & tenake & 30. Wallaby & pumà \\
\hline 11. They (DU.F) & tenape & 31. Bandicoot & \\
\hline 12. We (PL) & ne & & \\
\hline 13. You (PL) & e & E-Plants & \\
\hline 14. They & te & & \\
\hline & & 1. Tree & rítóe \\
\hline D - Animals & & 2. Bark & ríro \\
\hline & & 3. Leaf & ríha \\
\hline 1. Bird & táng & 4. Thorn & kong \\
\hline 2. Wing & fang & 5. Seed, flower & ríto \\
\hline 3. Egg & kúng & 7. Betel nut & fa \\
\hline 5. Dog & naké & 8. Chewing betel & lóengfong \\
\hline 6. Tail & béngro & 9. Lime & 0 \\
\hline 7. Pig & pále & 10. Coconut & hang \\
\hline 8. Fish & móe & 11. Banana & ìngno \\
\hline 9. Prawn & là & 12. Salt & tína \\
\hline 10. Crab & kung & 13. Sago tree & hòe \\
\hline 11. Snake & í & 14. Sago flour & hòena \\
\hline 12. Goanna & ifóngta & 15. Sago porridge & hòe \\
\hline 13. Gecko & rúru & 16. Sago sinole & kóe \\
\hline 14. Worm & & 17. Rice & rámángku \\
\hline 15. Mosquito & léng & 18. Kunai & ta \\
\hline 16. Louse & fí & 19. Root & hangling \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|}
\hline 20. & Bamboo & pung, oe, rè & & Mud & fítong \\
\hline 21. & Breadfruit (flesh) & yù & \multicolumn{2}{|l|}{G - Human artifacts} & \\
\hline 22. & Breadfruit (seeds) & fè & & & \\
\hline 23. & Yam & óe & \multirow[b]{2}{*}{1.} & & \\
\hline 24. & red yam & óemòe & & Garden & líhi \\
\hline 25. & long yam & óewá & 2. & House & pá \\
\hline 26. & pounded tuber & lang & 3. & Roof & ho \\
\hline 27. & Taro & manúa, nále & 4. & Village & bàme \\
\hline 28. & Sweet potato & rangueke & 5. & Rope & à \\
\hline \multirow[t]{2}{*}{29.} & \multirow[t]{2}{*}{Rattan} & \multirow[t]{2}{*}{àri} & 6. & Canoe & tang \\
\hline & & & & Paddle & ná \\
\hline \multicolumn{2}{|l|}{\multirow[b]{2}{*}{F - Natural world}} & & 8. & Path/road & lòeng \\
\hline & & & & Machete & anabì, tàng \\
\hline 1. & Soil & fítong & 10. & & rangwaue \\
\hline 2. & Stone & wúng & 11. & Bow & pìng \\
\hline 3. & Sand & hángto & 12. & Arrow & tà \\
\hline 4. & Beach & báng & 13. & Spear & pangbì \\
\hline 5. & Water & pa & 14. & Knife & tangnófo \\
\hline 6. & Sea & já & 15. & Cloth & ró \\
\hline 7. & River & pa & 16. & stirring spoon & ní \\
\hline 8. & Lake & pato & 17. & Fish-hook & \\
\hline 9. & Cloud & a & 18. & Lamp (loan, & rangwì \\
\hline 10. & Rain & fu & & Malay) & \\
\hline 11. & Thunder & pítang pu i li & 19. & Wok & \\
\hline 12. & Lightning & hénghèng & 20. & Net bag & ha \\
\hline 13. & Sky & pítang & 21. & Comb & hátòpu, lafí \\
\hline 14. & Wind & féng & 22. & & píri, lóeúe \\
\hline 15. & Sun & ráng & 23. & Spoon & ní \\
\hline 16. & Moon & ke & 24. & Sago fork & anángbí, ferí \\
\hline 17. & Night & rángpang & 25. & Beads & túe \\
\hline 18. & Star & ha & 26. & Bucket & a, hòe tátá \\
\hline 19. & Fire & rá & 27. & House fence & koe \\
\hline 20. & Smoke & rápong & 28. & Garden fence & tè \\
\hline 21. & Ashes & túe & & & \\
\hline 22. & Forest & hángpeng & H - & Location & \\
\hline 23. & Mountain & pì & & & \\
\hline 24. & Mangrove & ráng & & This & Wia \\
\hline
\end{tabular}

\begin{tabular}{llllr} 
6. & Cold & lang & 17. & Split (wood) \\
7. & Good & héfèng & 18. & Tie
\end{tabular} lé
\begin{tabular}{llrllr} 
6. & Tomorrow & fé(ung) & 10. & When? & ráng nè \\
7. & Who? & bá & 11. & Why? & ya te, ya toe \\
8. & What? & ya & 12. & How? & ya pa \\
9. & Where? & nè & & &
\end{tabular}

\section*{A1.2 Skou - English finderlist}

The following list is alphabetised, and comprises not only the material in A1.1, but further basic lexical materials as well, since the amount of description available for the Skou language is very small. In the headings \(o e\) is listed after 0 , and ue following \(u\). Only the \(1 S G\) forms of verbs are given; more complete paradigms can be found in A2.

\section*{A \(\mathbf{a}\)}
a, a., young
a, d., the
a, n., cloud
a, n., blackpalm
a, n., bucket
a wa li e, v., raise
à, n., rope
à, a., clear à fí, v., ring
à hù, v., sew
àbi, pl., Abepura
áha li, n., measure
áì, n., father
áli, n., leech
áling, num., one
aloru, v., mistreat
amanè, p., we two
ana, and
anábí, n., machete
anake, p., we two
anangbí, n.,
"chopsticks"
anape, p., we two
anará, a., like
ang, n., poison, fish
àng, a., dry
angku, n., child
ánì, n., mother
àno, n., rope tree
àoule, n., string
apále, n., crab
ápí, n., story
àpi, customs
ápólè, n., genemon
apóue, n., jambu (sp.)
apúlo, n., plate
àri, n., rattan
àri tete, n., rattan
atále, bit
atáwú, n., spirit
àti, n., meat, fish
àti, n., centipede
àti malang, n.,
centipede with blue legs
átóe, n., nibong tree
atu tútú, n., clouds, white at sea
áue, n., jambu

\section*{B b}
bá, q., who
bà, n., person
bafàng, n., sibling, younger
bahóe, n., generation cohort
bahúe, n., sibling, elder
baláng, n., basket
balàng li, v., curse
balèng, n., male
bàleng, n., photo, picture, shade
bama, n., ghoul
bàme, n., village
bamúa, a., true
bang áling, Monday
bang héngtong, Wednesday
bang hìngtung, Tuesday
bang nápang, n., Friday
bang nápang héngtong, Sunday
bang nápánghì, Saturday
bang nongpong,
Thursday
báng, n., beach
báng (li), v., crack
bàng, t., yesterday
bàngto, t., yesterday
\[
+ \text { one }
\]
bàngtoung, t., earlier
bápá(ne), n., friend
bápáli, a., big
barí, n., ondoafi
bàro, n., widow
batáko, n., orphan
bàti, n., name
bé, n., reef
bé, n., stone for sharpening
bèngro, n., tail
béngue, n., cucumber
bí, a., empty
bí, n., tree with air roots
bí, n., shell, plating
bí, n., floor
bibi, n., wind, north
bíng, n., tree species
bìng, v., die (many)
bítà, n., shade platform
bìue, v., care for
bóe, n., lid (of pot,
...)
bóe, v., fight
bòe, n., blister
boeboe lá, v., bark, growl
bóeng, n., leg, upper
bòeng, n., basket
bóengbà, n., thigh,
front
bòengfa, a., light
bóengkóeé, n.,
hamstring
bòera, n., crosspoles

\section*{E e}
e, n., sister in law
e, p., you
e, v., burn
e, v., go east
e, v., go up
é, n., bone
é ko tue, swollen
è, a., cooked
è e, p., your
è na, v., try
è pa, boil
èra, roast
è ti, a., hot
è(ne), n., wife
èfa, a., ripe
ehá i li, shine
èkung, a., weak
enake, p., you two
enape, p., you two
epà, n., tree, string
èpa li, n., dream

\section*{F f}
fa, n., betelnut
fa, p., only
fa, v., use
fa, v., carry
fá, n., wall
fà, a., naked
fáfa, n., aunt
fáfà, a., open
fáng, n., wing
fángfù, wind, south
faráfong, n., tongs
fátà, a., all
fáti, n., hut
fátí, v., lay down
Fáwi báng, n., place name
fe, n., fork, chopsticks
fe hùefe, n., tongs
fé, t., tomorrow
fé, v., anchor
fé, v., perch
fé, v., place, put
fè, n., breadfruit
féféhá, n., star, morning
fela, n., fork, large
félangro, year
félangro a toe, year, next
félangro te, year, last
félangro wi a, year, this
fèmu, zigzag
féng, \(n\)., wind
féng bápáli, n., storm
féng langro, season, east wind
fèng, a., bad
fetànghapa, n., morning
fétangpi, t., day after tomorrow
fétangpiung, t., yesterday + two
féung, \(t\)., tomorrow
fi, n., mud
fí, n., louse
fí, v., run into
fí, a., muddy
fítong, n., ground, soil
fóe, n., spittle
fòe, n., sago pounder
fóefóe, n., soap
fóefóe, \(n\)., foam
fongtà, n., lizard, green tree
fu, n., rain
fu, n., bottom
fu, v., pay
fu popo, n., drizzle
fu wa ro, season with west winds
fú, a., blind
fú, n., post of house, corner
fù, a., half
fue, v., see
fue, v., cry
fue, v., afraid
fue \(a\), d., that
fue a, there
fue ka, v., brave
fuelang, v., recognise
fújéng, n., chair
fúnglìng, n., scorpion
fútong, n., buttock, side

\section*{Hh}
ha, n., star
ha, n., bag
ha, v., walk
-ha, what
ha hí na, v., push
ha kúti, n., star, falling
ha lú, v., pull
há, n., nose
há, v., pound
há, v., from
há (loeng), v., stand
há hi, v., count
há pá bàng úe, n., southern cross
há pá yong oe, n., Orions belt
há te, v., close
hà, v., weave
háháfa, a., slow
hahung, n., bag, large
hang, n., coconut
hang \(i, n\). , coconut
hang i ba, n., coconut
hang lé ke loe, n., coconut, sprouting
hang òe pa, n., coconut
hang páró, n., coconut husk
hang táré, n., coconut, drinking
hang yá, n., coconut, old
háng, n., intestines (end)
háng, n., kidney
hangbang, a., far
hangbaue, n., coconut
hangfóng, n., coconut frond
hangkúe, n., kneecap
hangkúe, n., coconut shell
hangléúe, n., citrus, ball
hangling, n., root
hangong, n., coconut
hangpà, num., twelve
hángpeng, n., bush
hangpong, n., coconut juice
hangri, n., coconut cream
hángta, n., skull
hàngti, n., rope, coconut
hangtu, n., sand
hápa, a., small
hàpe, encroach
hapùng, n., termite
hatà, v., run
háti, n., bag strap
hatò ungpáue, n., spider, funnelweb
hatòpu, n., comb
hatui, n., bag, small
háyu, v., chase
héfèng, a., good
héng, n., yawn
héng, v., ask
hèng, n., fart
hèng ká, v., accuse
hèng(me), n., brother, sister in law
hénghèng, n., lightning
héngtong, num., three
hetè, cook
hi, n., faeces
hi, v., go west
hi ta lúe, v., stop
hí, n., weeds
hí, sap
hí è ti, indigestion
hí wa, swell
hì, n., blood
hì wá, n., yell
hì wá, n., call
hí, pa hí, v., wash
híng, a., other
híng, v., crawl
hìngtung, num., two
hìoe, n., pandanus
hipong, urine
hipue, v., come down
hípúe, v., rotate
hípúe li, v., rotate
hítáfí, v., crash
híte, v., boil
hítong, n., bluefly
ho, p., front
hó, v., peel, undress
hò, n., roof
hò li, whistle
hò pi, tie together
ho(lo), a., above, front
hóe, v., go south
hòe, n., sago
hòe è, n., sago porridge
hòe tátá, bucket, medium
hoehí, n., sago water
hóeng, n., valley
hóeng, v., wait
hòepe, n., sago end
hòere, n., sago milk
hoetò, n., brother, sister in law
hóue, p., middle
hu, v., weave
hú, v., carry
hù, n., hammer
hue, v., tread
hue fèng, angry
húe, n., stomach
húe héfèng, happy
húe kí e tue, v., hungry
húe kukupa, n., intestine, small
húe lang, satisfied
húe oeng, v., think
huefa, a., old (person)
húehúefa, carefully
húeró, n., stomach,
outer
húeté, n., intestine, large
húhú, n., story
hung, n., edge (sharp)
húng, v., crawl
hùng, n., vagina

\section*{I i}
i, n., line
i, a., different
i, v., lie down
i li, v., be doing
í, n., snake
í, n., pool
ì, e., no!
ì, n., hole
ì lú, v., complain
í(ne), n., son in law
í(ne), n., father in law
ibábúeli, n., wasp
íboe, n., centrepole of house
ífángfong, n., spit
ífóngta, n., goanna (big)
ikáféng, a., long
íkóele, n., goanna, small, yellow
íkung, slack
íméri, n., snake (large)
ing, v., dig up
ing a, d., the
ingéngong, n., cat
ìngno, n., banana
ìngnopu, n., bunch of bananas
iri, v., cramp, be asleep
íwúng, n., snake, black and white

\section*{J j}
já, a., wet
já, n., sea
já, n., trap for pigs
já, n., cup, glass
Jáwung, pl., Nyao
jéng, n., place
jéng tu, n., heaven
jéng yata, n., marker
jí, v., break
jí, hit (pl)
jíng, v., open
jíng, sling
jíng re, v., fly
jíngpa, v., fly
jóka pa, while

\section*{K k}
ka, no
ka, p., focus
ka ing pa, until
ka ung a, just
ká, n., armband
ká, v., carry
ká, v., hit, kill
kákung, n., fireplace
kalèng, v., look for
kang, n., tusk
kang, v., eat
kángking li, meow
kangtíngi, n., vertebrae, C-7
kangtung, n., beetle, small
káue, n., mushroom
káúeoe, moldy
ke, p., he
ke angleng, n., bachelor
ke bà, n., man
ke bà ya na lung i li, n., teacher
ke enake, p., those two men
ke fá ko li, v., wear
keli, v., pour
ke we, here
ké, n., moon
ké, n., post for hanging things
ké, v., catch
ké e, n., moon, crescent
ké fue, v., leave
ké \(i\), v., put down
ké ke, p., his
ké leng, v., give
kéli, v., catch fish
ké lúpang, n., moon, dark
ké ti fue a, month, last
ké topu wi a, month, next
ké/wí/loe leng (ko), v., hide
keng, n., shaman
keng, n., half
kéng, n., neck
kéng re, v., go out
kéngé, n., neckbones
kepu, v., wear (hat)
ketong, a., little
kí, n., thorny vine
kí, v., scream
kíngue, n., frog, green tree
ko, c., until
ko, v., be at
ko, v., flow
kó, n., armband (special)
kó li, be on
koe, \(n\)., fence of house
kóe, n., sago pancakes
kóé́, n., back(bone)
kòee(lo), a., behind
kóeho, n., border
kóelong, n., phlegm
kóeng, n., tooth
kóeng ká, v., bite
kóengri, n., umbilical cord
kòepi, n., skirt, grass
kóeti, n., throat
kóeti ùepi e tue, thirsty
kóko, n., uncle, aunt
kong, n., edge
kong, p., under
kóng, n., thorn
kong(lo), down
kopí, n., coffee
ku, n., frog
ku, n., child
ku, v., stab
ku li, v., give birth
kú, n., dew
kú re, v., fall
kúci, n., marbles
kue, n., beetle, large
kúe, n., time
kúe, v., dig
kúeé, n., jaw
kúeta, n., beard
kúeta fa, v., beard, have
kúfong, n., umbrella
kuha, n., womb
kúkúfa, a., quick
kulílong, n., twin
kúng, n., crab, small
kúng, v., drink
kúng, v., sex
kungpáue, n., octopus
kungpáue, n., spider
kungpáue pá, n., spiderweb
kungpoeue, n., crab, ghost
kungtàng, n., shell
kungwóue, n., hermit crab
kurù, n., teacher
kúwí, a., dark

\section*{LI}
la, v., put up fence
la, v., accompany
lá, v., bake
lá, v., utter
là, n., prawn
là, v., help
là(ne), n., mother in law
láe, n., ribs, side
lafí, n., comb
láho, n., wall
lálà, n., cousin
láláfa i, a., again and again
lálápa, really
Ialapalìli, a., near
lang, n., dish of pounded tuber and coconut
lang, n., clay
lang, n., pot
lang, n., sago mix bowl
lang, v., tell story
láng, n., east wind
láng, v., hit woman
làng, n., foot
làng, v., chop
làng hípu, n., shoe, sandal
làng íto, n., heel
làng lú, v., kick
lángbí, n., toenail
làngbi, n., knee
lànghi, n., cockroach
lánghùe, n., calf
làngkangkang, n., toes, middle
langkénge, n., ankle
làngmama, n., toe, big
làngòe, n., ankle
làngong, n., sole
langpí, a., tasty, sweet
langpúlong, n., toe, little
langue mong, a., stutterer
lángue, n., mouth
làtue, n., corner
le, n., shellfish
le lue, v., lie
lé, n., drum
lé, v., chop down
lebi, n., shell
lelang, a., cold
lélúe, v., annoy
lemà pé, v., criticise
lémong, n., citrus fruit
léng, n., mosquito
léng re, v., lose
lèng, n., scales
lèng, n., ant, red
lèng, v., quiet
lèng, hide
lèng, n., hips
léngbángbáng, n., sandfly
léngfí, a., black léngho, a., surprised
lèue, n., peanuts
lèue, n., ketapang fruit
li, v., want
li, v., do, make
li, v., rotate
li ko fue, v., scare
li lue, v., trick
li lue, v., fool
lí, n., pole, house
lí, n., trough for sago
lí, v., boil
lí ká, v., festival
lí ko fèng, v., ruin
lí li, dance
lì, v., angry at
líhi, n., garden
líti, shake
lo hí, v., hit with hand
lo li, v., wash
ló, n., leaf, very young; bud
lo.e, n., north
lo.ko, n., east
lo.pí, n., south
lo.wóng, n., west
loe, n., ear
loe, n., ant
loe, v., come
loe fú, v., put down many
lóe, v., shave
lóe, v., make
lóe, v., pick
lóe, v., get many
lóe fe, v., leave
lóe leng, v., give many
lóe póeng, deaf
loehí, v., put
loelóng, n., nostril
lóelóng lúe ka, naughty
loelóngtue, n., nosebone
loeng, complete
loeng rang, v., think
lóeng, v., tell
lóeng, v., promise
loengfa, p., behind
loengfì, v., think
lóengfong, n., betel pepper
lòengma, n., path
lóengri, n., jellyfish
loepoe, stutter
lóeri, n., snot
lóeri li, v., sniffle
lóetí, n., earring
lóeto, n., beak
lóeúe, n., mat
lololi, v., exchange
lómó li, v., grumble
long, n., hole, cave
long, n., key
lóngmo há, v., jealous
longmung, a., surrounded
lópa, before
lu, a., full
lu, a., narrow
lú, v., shoot
lú, v., straighten
lú fápoeng, a., sleepy
lú fi, v., cough
lú hí, v., hit with hand
lú pong pong ya li, v., pray
lú weng, v., sleep
lúbi, n., eyebrow
lue, n., bee species
lúe, v., blow
lúe, v., hear
lúe, v., chop branches
lúe, n., basket
lúe, v., build
lúe pa, p., together
lúefa, v., cross
lúeti, a., alone
lúfongfong, n., eyelid
luhí, hit
lúng, n., fly
lùng, n., crab, species
lupà, a., dark
lúto, n., eye
Iúto fú, a., blind

\section*{Mm}
ma, v., fall (rain)
mà me, v., ridicule
má(me), n., mother
(someone else's)
mabírí, num., twenty
four
M áke, pl., Vanimo
máki, a., big
manúa, n., taro
matítí, n., earthquake
me héfèng moeng
moeng, goodbye
mé, n., pandanus
mè, p., you
mè me, p., your
mè me, p., your
mè moe moe, goodbye
mó, n., season
moe, v., return
móe, n., fish
móebí, n., flying fish
móehábá, n., whale
móehí, n., eel
móeí, n., turtle, big
moeláng, n., turtle, medium-sized
moelí, n., flying fish
moelì, n., ray, manta
moelíue, n., turtle
móelíúe, n., dolphin
móema, n., shark
moeng, v., sit
móenòeng, n., crocodile
moerító, n., fish species
móerú, n., fish species
moetáló, n., eel, smooth
móewú, n., barracuda
moeyáng, n., catfish
mong, n., shaft
mong, v., sit, be
mòng, n., affect
mòng wí, v., blow,
hit, punch (receive)
múngòe, a., deep

\section*{N n}
na, n., flesh
na, q., question
na, c., or
na li, v., play
na lu, v., pound
na lùng, v., teach
ná, n., paddle
ná, n., sago package
ná hú, v., paddle
ná pi, v., tired
nà, a., left
nà hi, v., hate
nà oe, v., playful
náfeng, a., strong
náhìpa, num., eight
náhìpa pa áling, num., nine
náhìpa pa héngtong, num., eleven
náhìpa pa hìngtung, num., ten
naké, n., dog
nakong, n., house space
nále, n., taro bete
nále li, v., pound taro
nápang, num., five
nápang héngtong,
num., seven
nápánghì, num., six
napì, a., slippery
narángrang, q., how many
náti, a., new, young
nawàng, stick to
nawò, a., many
nawóng, n., flooring
ne, p., we
nè, q ., where
nè ne, p ., our
néko, n., forehead
ní, n., sago stirring spoon
nì, p., I
nì ne, p., my
níròe, n., squid
nò, n., arm
nò li, v., beckon
nòbero, n., wrist
nòbi, n., fingernail
nòe, n., body
nòe e, sick
nòe lue, a., skinny
nòe pará, n., appearance
nòe rapu, v., rub
nòe ró, n., shirt
nòe wé te hó, proud
nóele, a., dirty
nóeng, a., fever
nòepi, a., weak
nóeró, n., skin
nòeta, n., hair of body
nòeti, n., body
Nofé, pl., Jayapura
nohóue, n., fingers, middle
nòkangkang, n., finger
nòkangkang áha, n., span
nòkenge, n., wrist
nókóra, n., hand, back of
nòmama, n., thumb
nóng, n., breast
nongfong li, v., scratch
nongpong, num., four
nòong, n., palm
nopúlong, n., finger, little
nòruerue, n., elbow nòruerue áha, cubit nóto, n., chest nówùng, n., knuckle nú, n., tree with straight leaves
núng, n., fish net like butterfly net
núng, n., net, hand
nupà wí, smell
nupá(ho), n., armpit

\section*{0 o}

0, v., go seawards
ó, n., lime
ó, n., grub
ó, n., wave
ó hòeha, n., sago grub
ójá, n., caterpillar, hairy
ojíng, n., chicken ong fa, v., fool
óngmi, n., firefly
ópu, n., penis covering

\section*{OE oe}
oe, n., bamboo buluh
oe ká, n., burp
óe, n., ant, black
óe, n., yam
òe, n., penis
òe, v., jump
òebi, n., cheek
òebi, n., testicle
oefá, a., ripe
òefu, cross-pole
óemòe, n., yam species
oeng, remind
oeng ili, v.,
remember
oeng ko tue, v., remember
oeng ne, v., refuse
òeng, v., let go
óenge, n., back
óera, n., dowel
óerang, n., housepost
óewá, n., yam,
species

\section*{\(\mathbf{P}_{\mathbf{p}}\)}

Pa bípa, pl., river at Skou Yambe
Pa ílong, pl., Tami river
Pa pípa, pl., river at Skou Mabo
Pa púbí, pl., river at Skou Sai
Pa rang, n., river \(P a\) úerong, river
pa, a., sufficient
pa, c., with
pa, n., water
pa, n., river
pa, pot
pa (te bà pa), a.,
crowd
pa ku ili, n., waterfall
pa pi, v., swim
pá, n., house
pà, a., right
pà, v., scratch
pà, house, cult
pahíng, capsize
paí, n., well
pake, n., colour
palang, n., pot for water
pále, n., pig
páli, n., kraken
palòe, n., house
platform
paloeng, n., river
palóng, n., rivermouth
pálue, n., remains
pang, n., pus
páng, n., bedbug
páng, n., son in law
páng, v., chop down many
páng(pe), n., husband
pangbì, n., arrow for pigs
papáng, n., steam
pará, v., resemble
párang, n., house pole
parue, n., source of a river
patá, n., tea
pátáng, n., ceiling
pátángke, n.,
kingfisher
patítí, n., freckle
pato, n., lake
páto, n., candle nut
pátóe, beighbour
páue, n., hunting party
páùee, n., ladder, house
páwu, n., shoulder
pe, p., she
pe angúe, n., woman, unmarried
pe enake, p., those two women
pe ueme hí a, n., ghoul, female
pé (i), v., put down
pé kang, v., smell
pére, v., lie down
pè pe, her
péfa, a., smoked
peng, v., forget
péng, n., tree species
péng, clear
pèng(lo), pl., outside
péngpèng li, v., sneeze
péngro, n., lip
péngue, n., mango
pi, v., tie
pí, a., half-ripe
pí, v., stop (rain)
pí, p., the one
pí, v., flow out
pí bamúa li, v., truth
pí li, speak
pí lóba, n., scree
pí lóeng, v., praise
pí pongpong li, v., shisper
pí tifèng lá, v., curse
pì, a., full
pì, n., mountain
pí(lang), n., language
piítu, n., island
pílang li, v., curse
pína, voice
píng, n., place where you find fish
píng, n., platform
pìng, n., bow
pìng, n., war
pirárá, mole
píri, n., mat
pítang, n., sky
pítang pu ili, n., thunder
pitue, n., foothill
píue, n., wound
píúelúe, scar
pó, n., vegetables
poe, a., thick
poe ka, thin
poe yá, n., rope, coconut
póeng, n., tongue
póepue, a., round
póí, n., spinach
pong, v., blow (at fire)
pong, n., cape
pong, a., closed
póní, n., sarupaku;
main vegetable
póweng, n., gedi
pu, n., nest
pu, n., writing
puli, v., write
pú, n., mammal
(furry)
pú, n., tail
pù, n., conch shell
púbà, n., cuscus black/white
púbèng, n., cuscus yellow/red
púfàue, n., cuscus red/white
puháhá, cuscus (sp.)
púle, n., rat, cuscus
púle, n., bandicoot
pumà, n., wallaby
pung, n., heart
pung, n., bamboo
pung, v., butcher
pung héfèng, a., happy
pung li, v., like
pung tóta, a., smart
púpí, n., sugar glider, male
púpúe, n., tree réngréng, a., heavy kangaroo sp.
pupúki, n., eggplant
púru, n., kangaroo, tree
púsú, n., bottle
púwa, n., sugar glider, female

\section*{R r}
ra, n., fire
ra, p., also
ra è há, v., burn
rà li, v., burn
rabáká, n., tobacco
rabáká túpa, n., cigarette
rahé, n., strainer, coconut
rámang, n., ant, black
rámáng ku, n., rice
ráng, n., sun
ráng, n., mangrove ráng héfèng, dood day
ràng, n., ironwood
ràng, n., housepole
rángkue, n., hour
rànglai, n., poles,
house
rángleng, t., afternoon
rángleng héfèng,
afternoon, good
rángnè, q., when
rángpang, n., night
rángpang héfèng, good evening
rángto, n., nape
rángúeke, n., sweet potato
rangwaue, n., axe
rangwì, n., lamp
rápong, n., smoke
rapu, v., rub
rapue, v., descend
rárí, n., burning wood
ráue há, v., laugh
rawó, n., torch
rawòng, n., coals
rawòng è ko tue, n., coals, hot
re, v., go
ré, n., bridge
rè, bamboo
re(me), n., father
rí, n., wood
rí, n., scales
rí, n., tree
ríha, n., leaf
ríha pake, a., green
ríhí, n., sap
rílélé, a., short
rílo, n., bud
rílolo, n., woodchips
ríne, n., branch
ríoe, n., planks of wood
ríótí, n., tree with edible grubs
rípang, n., flower
rírífa, short
ríro, n., bark
ríto, n., seed
ríto, n., staff
ríto ùeli, n., chilli
rítóe, n., tree
ríwo, n., knot (wood)
ro, a., hollow
ró, n., matoa tree
ró, n., cloth
ró, n., skin
ró ka, embarassed
ròebi, n., head
ròengha, n., ground pole
rong, a., old
Rópu Ù eli, n., bible
rópu, n., book
rue, n., handle
rue, stand, be at
rùe, n., horn
rúeto, n., cupboard, box
rúng, n., staff
rùng, n., sugarcane
rúngpóng, n., sugar
rúru, n., gecko
rúrú léng, hide-andseek
rútapi, a., bald
rúto, n., pot

\section*{S s}
sangbíki, n., pumpkin (<
Menado Malay)
so, c., well

\section*{Tt}
ta, n., hair
ta, n., kunai
ta ékung, straight hair ta hùng, v., sit down ta nafeng, frizzy
tà, n., arrow
tà(ne), n., co-parents
tábá, n., army
tàheng há, v., jealous
taíngbe, n., money
tajíng, v., push
tàki, n., bowstring
takúe, n., punji sticks
takúe, n., noose
talé, n., gills
tang, n., gall
tang, n., canoe
tang, t., last night
tang ke bà tí fa, n., owl
táng, n., bird
táng, n., net for fish
tàng, n., machete
tángángue, n., pigeon
tángáue, n ., tern
tangbéro, n., butterfly
tangbéro léngfi, n., butterfly, black
tangbéro tútú, n., butterfly, white
tángboe, n., pigeon, crowned
tánge, n., leg
tángé, n., eagle
tànge, a., bitter, sour
tànge ró, n., trousers, shirt
tangfà, house, men's
tángfáng tútú, n., angel
tángfí, n., bat, black
tángfòemo, n., dragonfly
tanghang, n., outrigger
tánghang, n., face
tánghang li, v., dizzy
tánghang li, tanghang, v., birth, born
tanghápang, n., motorbike
tanghì, n., bracelet
tánghó, n., feather
tánghung, n.,
knifeedge
tánghung li, n.,
sharpen (knife)
tangké, n., eagle
tángkengkeng(wa), n., bat, small
tangkóe, n., canoe platform
tánglé, n., spear
tánglè, n., lorikeet
tanglílong, n., scissors
tánglú, n., eagle, spotted and big
tangmío, n., tomahawk
tangmoe, n., canoe, sea
tángná, n., cockatoo
tangnófó, n., knife
tangnófó títí, n., knife, large
tangóe, n., bat
tángpá, n., heron
tangpaja, n., mirror
tangpeng, n., canoe sides
tangpu, n., shin
tángráng, n., bird of paradise
tángrángpoe, n., bird of paradise
tángróepa, n., cockatoo, palm
tàngru.e, n., chest
tangrúe, n., rudder
tangrúe, n., captain
tángrue, n., mantis, praying
tángrúe, n., handle of a machete
tángrùe, n., cassowary
tangrúerúe, n., willy wagtail
tangta, n., outrigger connector
tángtí, n., cicada
tangtítí, n., car
tangtó, n., front of a canoe
tángung, n., hornbill
tángwà, n., tern
tangwáto, Cape Jar
tangwáue, n., bush turkey
tangwu, n., canoe, small
tangyúpa, a., blue
tapí, a., hot
tapí, a., crooked
tata, n., grandparent, grandchild
tata ku ke, n., Jesus
Te ba Kófo, pl., Nyao Kofo
Te bà Lato, pl., Serui, Yapen
Te Bàlea, pl., Biak
Te Bapóeme, n., Patipeme
Te Bapúbi, pl., Skou Sai
Te Bátútú, n., Indonesian
Te Húele, pl., Sangke
Te Hùepa, n., Palora
Te Húngfa, pl., Sentani
Te Kéfa, n., Ramela
Te Kóemo, n., Kemo
Te Lángfa, pl., Tanah Merah
Te Léti, n., Rollo
Te Lómo, n., Lomo
Te Lóngpa, pl., Enggros
Te Lú, pl., Waromo
Te Lùng, pl., Ormu
Te M álo áling, n., Mallo
Te M álo hìngtung, n., Mallo
Te Máwo, pl., Skou Mabo
Te M élong, pl., Kayu Pulau
Te M òru, pl., Moso
Te M úngtang, n., Mungtang
Te Nàli, n., Nali
Te Nóemo, pl., Nyao Nemo
Te Ó eti, pl., Wutung
TePa, pl., Tobati
Te Pòeng, pl., Skofro
Te Purà, pl., Kayu Batu

Te Táng, n., Indonesian
Te Tángpe, pl., Skou Yambe
Te Tangpúto, n., Tangputo
Te Téme, pl., Nafri
Te Ù eli, n., whites
Te Wí, n., Awi
Te Yákó, pl., Yako
Te Yálu, n., Membilo
Te Yong, pl., Vanimo
te, p., they
te, result
te bà pápá (te), n., people, foreign
te bálèng, n., ghost
te bàmoe, n., Papuan
te batí, n., devil
te bàto, n., guest
tè, n., fence, garden
tè te, p., their
tenake, p., those two
tenape, p., those two
téngna, n., tree species
tété, a., important
ti, n., string
tí, n., sea
tí hoe toe, tide, high
tí ko ti, tide, low
tí toto, n., wave, small
tí yabípang,
phosphorescence
tího, n., door
tílong, n., doorway
tíná, n., salt
tínà, n.,
phosphorescence
tíó, n., wave
tipáng, sea spray
títí, n., uncle
to, p., or
to li, v., sharpen
tó, a., inside
tò, n., seed
toe, result
toe, p., beside
tóe li, v., prepare
tóé, n., shoulderblade
toeho, p., side
tóeho, n., waist
tóepa, n., dust
tóepi, v., pack
tóeùe, n., aunt
tong, n., shoots
topó, a., blunt
tópu, front
tóró, n., shoulder
totá, a., sharp
totó, a., old
tú, n., ship
tue, move to side
túe, n., beads
tuelóelóe, a., straight
túfa, n., stern
tujíngpa, n., plane,
helicopter
túlang, n., tobacco
túnghá, n., leaf, smelly
tunghúbi, n., shin
túngpa, perfect
tútó, n., prow
tútú, a., white

\section*{\(\mathbf{U} \mathbf{u}\)}
ù, a., smell
ung, t., now
ung a, a., new
ung a pa, a., recently
ung hí, v., confused

\section*{UE ue}
ùe pung, v., marry
ùe te, v., sink
ùee, n., ladder
ùefa, n., legend
ùeli, a., red
ueme, n, a., woman
ùepi, a., dry

\section*{W w}
wa, n., cave
wa ko ra te, until
wá, n., basket
wá, v., plant
wá, v., beg
wà, n., west wind
wang, v., die
wáng, n., sail
wátóepa, a., close, very
wé, v., get
wé fo, v., leave
\begin{tabular}{|c|c|}
\hline wé i, v., put down (feminine) & wung, v., die wúng, n., joint (body \\
\hline wéleng, v., give & bamboo) \\
\hline wé leng te te, v., send wéli, v., hang & wúng, n., stone \\
\hline wé pu, v., cover wépu, v., cover & Y \(\mathbf{y}\) \\
\hline wi a, d., this & ya, n., what, thing ya ápatàngpang, n., \\
\hline wí ta fí, v., leave & animal \\
\hline \begin{tabular}{l}
wing, n., thread \\
wò, p., very
\end{tabular} & ya héfèng pingping, \\
\hline wóewoe, n., hat & ya hénglong, n., \\
\hline woto, n., poles used for roofing & rubbish \\
\hline wówo, n., uncle & ya puli, v, draw \\
\hline wu, v., narrate & \\
\hline
\end{tabular}
ya rópu nà, n., kite yata li, v., buy ya te, q., why yatà li, v., steal ya toe ko, why yá, n., grass yá i li, shine yá(ne), n., sister yabíto, n., firefly yáhue, n., spell yali, a., short yámo, medicine yang, v., vomit yáng, v., sick yàng, a., old yángue, n., boil yano, n., work yaramenà, n., song
yáya, n., great grandparent yayong, n., food yó, a., long yong, n., ampas yu, n., cousin yu, wipe clean yú, v., search for yù, n., breadfruit yù, v., until yu(ne), n., brother

\section*{A1.3 English - Skou reversal}

The following list is simply a reversal of A1.2.

\section*{A \(\mathbf{a}\)}

Abepura, àbi
above, front, ho(lo)
accompany, la
accuse, hèng ká
affect, mòng
afraid, fue
afternoon, rángleng
afternoon, good, rángleng héfèng
again and again, láláfa i
all, fátà
alone, Iúeti
also, ra
anchor, fé
and, ana
angel, tángfáng tútú
angry at, lì
angry, hue fèng
animal, ya ápatàngpang
ankle, langkénge, làngòe
annoy, lélúe
ant, loe
ant, black (sp.), óe
ant, black (sp.), rámang
ant, red, lèng
appearance, nòe
pará
arm, nò
armband (special), kó
armband, ká
armpit, nupá(ho)
army, tábá
arrow for pigs, pangbì
arrow, tà
ask, héng
aunt, fáfa
aunt, tóeùe
Awi, Te Wí
axe, rangwaue

\section*{B b}
bachelor, ke angleng
back, óenge
back(bone), kóeé
bad, fèng
bag, ha
bag strap, háti
bag, large, hahung
bag, small, hatui
bake, lá
bald, rútapi
bamboo buluh, oe
bamboo, pung, rè
banana, ìngno
bandicoot, púle
bark, ríro
bark, growl, boeboe lá
barracuda, móewú
basket, baláng, bòeng, lúe, wá
bat, tangóe
bat, black, tángfí
bat, small, tángkengkeng(w a)
be at, ko
be doing, i li
beach, báng
beach name, Fáwi báng
beads, túe
beak, lóeto
beard, kúeta
beard, have, kúeta fa
beckon, nò li
bedbug, páng
bee species, lue
beetle, large, kue
beetle, small, kangtung
before, Iópa
beg, wá
behind, kòee(lo), loengfa
beighbour, pátóe
beside, toe
betel pepper, lóengfong
betelnut, fa
Biak, Te Bàlea
bible, Rópu Ù eli
big, bápáli
big, máki
bird of paradise,
tángráng
bird of paradise
(sp.),
tángrángpoe
bird, táng
birth, born,
tánghang li, tanghang
bit, atále
bite, kóeng ká
bitter, sour, tànge
black, léngfí
blackpalm, a
blind, fú, Iúto fú
blister, bòe
blood, hì
blow (at fire), pong
blow, Iúe
blow, hit, punch
(receive), mòng wí
blue, tangyúpa
bluefly, hítong
blunt, topó
body, nòe, nòeti
boil, è pa, lí
boil, híte
boil, yángue
bone, é
book, rópu
border, kóeho
bottle, púsú
bottom, fu
bow, pìng
bowstring, tàki
bracelet, tanghì
branch, ríne
brave, fue ka
breadfruit, fè, yù
break, jí
breast, nóng
bridge, ré
brother, yu(ne)
brother, sister in law, hèng(me)
brother, sister in law, hoetò
bucket, a
bucket, medium, hòe tátá
bud, rílo
build, Iúe
bunch of bananas, ìngnopu
burn, e
burn, ra è há, rà li
burning wood, rárí
burp, oe ká
bush, hángpeng
bush turkey, tangwáue
butcher, pung
butterfly, tangbéro
butterfly, black, tangbéro léngfi
butterfly, white, tangbéro tútú
buttock, side, fútong
buy, yata Ii

\section*{Cc}
calf, lánghùe
call, hì wá
candle nut, páto
canoe platform, tangkóe
canoe sides, tangpeng
canoe, tang
canoe, sea, tangmoe
canoe, small, tangwu
Cape Jar (Cape Hol), tangwáto
cape, pong
capsize, pahíng
captain, tangrúe
car, tangtítí
care for, bìue
carefully, húehúefa
carry, fa, hú, ká
cassowary, tángrùe
cat, ingéngong
catch fish, ké li
catch, ké
caterpillar, hairy, ójá
catfish, moeyáng
cave, wa
ceiling, pátáng
centipede, àti
centipede with
blue legs, àti
malang
centrepole of house, íboe
chair, fújéng
chase, háyu
cheek, òebi
chest, nóto, tàngru.e
chicken, ojíng
child, angku, ku
chilli, ríto ùeli
chop branches, lúe
chop down, lé
chop down many, páng
chop, làng
"chopsticks", anangbí
cicada, tángtí
cigarette, rabáká túpa
citrus fruit, lémong
citrus, ball, hangléúe
clay, lang
clear, à, péng
close, há te
close, very, wátóepa
closed, pong
cloth, ró
cloud, a
clouds, white at sea, atu tútú
co-parents, tà (ne)
coals, rawòng
coals, hot, rawòng è ko tue
cockatoo, tángná
cockatoo, palm, tángróepa
cockroach, lànghi
coconut cream, hangri
coconut frond, hangfóng
coconut (stage), hang
coconut (stage), hang i
coconut (stage), hang i ba
coconut (stage), hang òe pa
coconut (stage), hangbaue
coconut (stage), hangong
coconut husk, hang páró
coconut juice, hangpong
coconut shell, hangkúe
coconut, drinking, hang táré
coconut, old, hang yá
coconut, sprouting, hang lé ke loe
coffee, kopí
cold, Ielang
colour, pake
comb, hatòpu, lafí
come down, hipue
come, loe
complain, ì lú
complete, loeng
conch shell, pù
confused, ung hí
cook, hetè
cooked, è
corner, làtue
cough, Iú fi
count, há hi
cousin, lálà, yu
cover, wé pu
cover, wépu
crab, apále
crab, ghost, kungpoeue
crab, small, kúng
crab, species, lùng
crack, báng (li)
cramp, be asleep, iri
crash, hítáfí
crawl, híng
crawl, húng
criticise, lemà pé
crocodile, móenòeng
crooked, tapí
cross, lúefa
cross-pole, òefu, bòera
crowd, pa (te bà
pa)
cry, fue
cubit, nòruerue áha
cucumber, béngue
cup, glass, já
cupboard, box, rúeto
curse, balàng li
curse, pí tifèng lá, pílang li
cuscus (sp.), puháhá
cuscus
black/white, púbà
cuscus red/white, púfàue
cuscus yellow/red, púbèng
customs, àpi

\section*{D d}
dance, lí li
dark, kúwí
dark, lupà
day after tomorrow, fétangpi
deaf, lóe póeng
deep, múngòe
descend, rapue
devil, te batí
dew, kú
die (many), bìng
die, wang
die, wung
different, i
dig, kúe
dig up, ing
dirty, nóele
dish of pounded tuber and coconut, lang
dizzy, tánghang li
do, make, li
dog, naké
dolphin, móelíúe
dood day, ráng héfèng
door, tího
doorway, tílong
dowel, óera
down, kong(lo)
dragonfly, tángfòemo
draw, ya pu li
dream, èpa li
drink, kúng
drizzle, fu popo
drum, lé
dry, àng
dry, ùepi
dust, tóepa

\section*{\(\mathbf{E} \mathbf{e}\)}
eagle, tángé
eagle, tangké
eagle, spotted and
big, tánglú
ear, loe
earlier, bàngtoung
earring, lóetí
earthquake, matítí
east, lo.ko
east wind, láng
eat, kang
edge (sharp), hung
edge, kong
eel, móehí
eel, smooth, moetáló
eggplant, pupúki
eight, náhìpa
elbow, nòruerue
eleven, náhìpa pa héngtong
embarassed, ró ka
empty, bí
encroach, hàpe
Enggros, Te
Lóngpa
exchange, lolo li
eye, Iúto
eyebrow, lúbi
eyelid, lúfongfong

\section*{F f}
face, tánghang
faeces, hi
fall (rain), ma
fall, kú re
far, hangbang
fart, hèng
father, ál
father in law, í(ne)
father, re(me)
feather, tánghó
fence of house, koe
fence, garden, tè
festival, lí ká
fever, nóeng
fight, bóe
finger, nòkangkang
finger, little, nopúlong
fingernail, nòbi
fingers, middle, nohóue
fire, ra
firefly, óngmi
firefly, yabíto
fireplace, kákung
fish, móe
fish net like butterfly net, núng
fish species, moerító
fish species, móerú
five, nápang
flesh, na
floor, bí
flooring, nawóng
flow, ko
flow out, pí
flower, rípang
fly, jíng re
fly, jíngpa
fly, lúng
flying fish, móebí
flying fish, moelí
foam, fóefóe
focus, ka
food, yayong
fool, li lue
fool, ong fa
foot, làng
foothill, pitue
forehead, néko
forget, peng
fork, chopsticks, fe
fork, large, fela
four, nongpong
freckle, patítí
Friday, bang nápang
friend, bápá(ne)
frizzy, ta nafeng
frog, ku
frog, green tree, kíngue
from, há
front, ho
front of a canoe, tangtó
front, tópu
full, lu
full, pì

\section*{G g}
gall, tang
garden, líhi
gecko, rúru
gedi, póweng
genemon, ápólè
generation cohort, bahóe
get many, lóe
get, wé
ghost, te bálèng
ghoul, bama
ghoul, female, pe ueme hí a
gills, talé
give birth, ku li
give, ké leng
give many, lóe leng
give, wé leng
go east, e
go out, kéng re
go, re
go seawards, 0
go south, hóe
go up, e
go west, hi
goanna (big), ífóngta
goanna, small, yellow, íkóele
good evening, rángpang héfèng
good, héfèng
goodbye, me héfèng moeng moeng
goodbye, mè moe moe
grandparent, grandchild, tata
grass, yá
great grandparent, yáya
green, ríha pake
ground pole, ròengha
ground, soil, fítong
grub, ó
grumble, Iómó Ii
guest, te bàto

\section*{H h}
hair of body, nòeta
hair, ta
half, fù
half, keng
half-ripe, pí
hammer, hù
hamstring, bóengkóeé
hand, back of, nókóra
handle of a machete, tángrúe
handle, rue
hang, wéli
happy, húe héfèng
happy, pung héfèng
hat, wóewoe
hate, nà hi
he, ke
head, ròebi
hear, lúe
heart, pung
heaven, jéng tu
heavy, réngréng
heel, làng íto
help, là
her, pè pe
here, ke we
hermit crab, kungwóue
heron, tángpá
hide, ké/wí/loe leng (ko)
hide, lèng
hide-and-seek, rúrú léng
hips, lèng
his, ké ke
hit (pl), jí
hit, luhí
hit with hand, lo J j
hí
hit with hand, lú
hí
hit woman, láng
hit, kill, ká
hole, ì
hole, cave, long
hollow, ro
horn, rùe
hornbill, tángung
hot, è ti
hot, tapí
hour, rángkue
house, pá
house platform, palòe
house pole, párang
house space, nakong
house, cult, pà
house, men's, tangfà
housepole, ràng
housepost, óerang
how many, narángrang
hungry, húe kí e tue
hunting party, páue
husband, páng(pe)
hut, fáti

\section*{I i}

I, nì
important, tété
indigestion, hí è ti
Indonesian, Te \(B\) átútú
Indonesian, Te Táng
inside, tó
intestine, large, húeté
intestine, small, húe kukupa
intestines (end), háng
ironwood, ràng
island, piítu
jambu (sp.), apóue
jambu, áue
jaw, kúeé
Jayapura, N ofé
jealous, lóngmo há
jealous, tàheng há
jellyfish, lóengri
Jesus, tata ku ke
joint (body, bamboo), wúng
jump, òe
just, ka ung a

\section*{K k}
kangaroo, tree, púru
Kayu Batu, Te Purà
Kayu Pulau, Te \(M\) élong
Kemo, Te Kóemo
ketapang fruit, lèue
key, long
kick, làng lú
kidney, háng
kingfisher, pátángke
kite, ya rópu nà
knee, làngbi
kneecap, hangkúe
knife, tangnófó
knife, large, tangnófó títí
knifeedge, tánghung
knot (wood), ríwo
knuckle, nówùng
kraken, páli
kunai, ta

\section*{LI}
ladder, ùee
ladder, house, páùee
lake, pato
lamp, rangwì
language, pí(lang)
last night, tang
laugh, ráue há
lay down, fátí
leaf, ríha
leaf, smelly, túnghá
leaf, very young;
bud, ló
leave, ké fue
leave, lóe fe
leave, wé fo, wí ta fí
leech, áli
left, nà
leg, tánge
leg, upper, bóeng
legend, ùefa
let go, òeng
lid (of pot, ...), bóe
lie down, i
lie down, pére
lie, le lue
light, bòengfa
lightning, hénghèng
like, anará
like, pung li
lime, ó
line, i
lip, péngro
little, ketong
lizard, green tree, fongtà
Lomo, Te Lómo
long, ikáféng
long, yó
look for, kalèng
lorikeet, tánglè
lose, léng re
louse, fí

\section*{M m}
machete, anábí
machete, tàng
make, lóe
male, balèng
Mallo, Te Málo áling
Mallo, Te M álo hìngtung
mammal (furry), pú
man, ke bà
mango, péngue
mangrove, ráng
mantis, praying, tángrue
many, nawò
marbles, kúci
marker, jéng yata
marry, ùe pung
mat, lóeúe
mat, píri
matoa tree, ró
measure, áha li
meat, fish, àti
medicine, yámo
Membilo, Te Yálu
meow, kángking li
middle, hóue
mirror, tangpaja
mistreat, aloru
moldy, káúeoe
mole, pirárá
Monday, bang áling
money, taíngbe
month, last, ké ti fue a
month, next, ké
topu wi a
moon, ké
moon, crescent, ké e
moon, dark, ké lúpang
morning, fetànghapa
Moso, Te Mòru
mosquito, léng
mother (someone else's), má(me)
mother, ánì
mother in law, là(ne)
motorbike, tanghápang
mountain, pì
mouth, lángue
move to side, tue
mud, fi
muddy, fí
Mungtang, Te \(M\) úngtang
mushroom, káue
my, nì ne

\section*{N n}

Nafri, Te Téme
naked, fà
Nali, Te Nàli
name, bàti
nape, rángto
narrate, wu
narrow, lu
naughty, lóelóng
lúe ka
near, Ialapalìli
neck, kéng
neckbones, kéngé
nest, pu
net for fish, táng
net, hand, núng
new, ung a
new, young, náti
nibong tree, átóe
night, rángpang
nine, náhìpa pa
áling
no, ka
no!, ì
noose, takúe
north, lo.e
nose, há
nosebone,
loelóngtue
nostril, loelóng
now, ung
Nyao, J áwung
Nyao Kofo, Te ba
K ófo
Nyao Nemo, Te Nóemo

\section*{0 o}
octopus, kungpáue
old (person), huefa
old, rong
old, totó
old, yàng
ondoafi, barí
one, áling
only, fa
open, fáfà
open, jíng
or, na
or, to
Orions belt, há pá yong oe
Ormu, Te Lùng
orphan, batáko
other, híng
our, nè ne
outrigger connector, tangta
outrigger, tanghang
outside, pèng(lo)
owl, tang ke bà tí fa
waterfall, pa ku i Ii

\section*{P p}
pack, tóepi
paddle, ná
paddle, ná hú
palm, nòong
Palora, Te Hùepa
pandanus, hìoe
pandanus, mé
Papuan, te bàmoe
path, Iòengma
Patipeme, Te Bapóeme
pay, fu
peanuts, lèue
peel, undress, hó
penis covering, ópu
penis, òe
people, foreign, te bà pápá (te)
perch, fé
perfect, túngpa
person, bà
phlegm, kóelong
phosphorescence, tí yabípang
phosphorescence, tínà
photo, picture, shade, bàleng
pick, lóe
pig, pále
pigeon, tángángue
pigeon, crowned, tángboe
pith, yong
place, jéng
place where you find fish, píng
place, put, fé
plane, helicopter, tujíngpa
planks of wood, ríoe
plant, wá
plate, a púlo
platform, píng
play, na li
playful, nà oe
poison, fish, ang
pole, house, IÍ
poles used for roofing, wóto
poles, house, rànglai
pool, í
post for hanging things, ké
post of house, corner, fú
pot for water, palang
pot, lang
pot, pa
pot, rúto
pound, há
pound, na lu
pound taro, nále li
pour, ke li
praise, pí lóeng
prawn, là
pray, lú pong pong ya li
prepare, tóe li
promise, lóeng
proud, nòe wé te hó
prow, tútó
pull, ha lú
pumpkin, sangbíki
punji sticks, takúe
pus, pang
push, ha hí na
push, tajíng
put down
(feminine), wé i
put down, ké i
put down many, loe fú
put down, pé (i)
put, loehí
put up fence, la

\section*{Q q}
question, na
quick, kúkúfa
quiet, lèng

\section*{R r}
rain, fu
raise, a wa li e
Ramela, Te Kéfa
rat, cuscus, púle
rattan, àri
rattan, àri tete
ray, manta, moelì
really, lálápa
recently, ung a pa
recognise, fuelang
red, ùeli
reef, bé
refuse, oeng ne
remains, pálue
remember, oeng i li
remember, oeng
ko tue
remind, oeng
resemble, pará
result, te
result, toe
return, moe
ribs, side, láe
rice, rámáng ku
ridicule, mà me
right, pà
ring, à fí
ripe, èfa
ripe, oefá
river at Skou Mabo, Pa pípa
river at Skou Sai,
Pa púbí
river at Skou
Yambe, Pa bípa
river, Pa rang
river, \(P\) a úerong
river, pa
river, paloeng
rivermouth,
palóng
roast, èra
Rollo, Te Léti
roof, hò
root, hangling
rope, à
rope tree, àno
rope, coconut,
hàngti
rope, coconut, poe
yá
rotate, hípúe
rotate, hípúe li
rotate, li
round, póepue
rub, nòe rapu
rub, rapu
rubbish, ya
hénglong
rudder, tangrúe
ruin, lí ko fèng
run, hatà
run into, fí

\section*{S s}
sago end, hòepe
sago grub, ó hòeha
sago, hòe
sago milk, hòere
sago mix bowl, lang
sago package, ná
sago pancakes, kóe
sago porridge, hòe e
sago pounder, fòe
sago stirring
spoon, ní
sago water, hoehí
sail, wáng
salt, tíná
sand, hangtu
sandfly,
léngbángbáng
Sangke, Te H úele
sap, hí
sap, ríhí
sarupaku; main
vegetable, póní
satisfied, húe lang
Saturday, bang
nápánghì
scales, lèng
scales, rí
scar, píúelúe
scare, li ko fue
scissors,
tanglílong
scorpion, fúnglìng
scratch, nongfong Ii
scratch, pà
scream, kí
scree, pí lóba
sea, já
sea spray, tipáng
sea, tí
search for, yú
season, mó
season with west
winds, fu wa ro
season, east wind,
féng langro
see, fue
seed, ríto
seed, tò
send, wé leng te te
Sentani, Te
H úngfa
Serui, Yapen, Te
bà Lato
seven, nápang
héngtong
sew, à hù
sex, kúng
shade platform, bítà
shaft, mong
shake, líti
shaman, keng
shark, móema
sharp, totá
sharpen (knife), tánghung li
sharpen, to li
shave, lóe
she, pe
shell, kungtàng
shell, lebi
shell, plating, bí
shellfish, le
shin, tangpu
shin, tunghúbi
shine, ehá i li
shine, yá i li
ship, tú
shirt, nòe ró
shisper, pí
pongpong li
shoe, sandal, làng
hípu
shoot, lú
shoots, tong
short, rílélé, rírífa, yali
shoulder, páwu
shoulder, tóró
shoulderblade, tóé
sibling, elder, bahúe
sibling, younger, bafàng
sick, nòe e
sick, yáng
side, toeho
sin, ya nóele li
sink, ùe te
sister in law, e
sister, yá(ne)
sit down, ta hùng
sit, moeng
six, nápánghì
skin, nóeró
skin, ró
skinny, nòe lue
skirt, grass, kòepi
Skofro, Te Pòeng
Skou Mabo, Te
Máwo
Skou Sai, Te
B apúbi
Skou Yambe, Te
Tángpe
skull, hángta
sky, pítang
slack, íkung
sleep, lú weng
sleepy, lú fápoeng
sling, jíng
slippery, napì
slow, háháfa
small, hápa
smart, pung tóta
smell, nupà wí, pé kang
smell, ù
smoke, rápong
smoked, péfa
snake (large), íméri
snake, í
snake, black and white, íwúng
sneeze, péngpèng Ii
sniffle, lóeri li
snot, lóeri
soap, fóefóe
sole, làngong
son in law, í(ne), páng
song, yaramenà
source of a river, parue
south, Io.pí
southern cross, há
pá bàng úe
span, nòkangkang áha
speak, pí li
spear, tánglé
spell, yáhue
spider, kungpáue
spider, funnelweb, hatò ungpáue
spiderweb, kungpáue pá
spinach, póí
spirit, atáwú
spit, ífángfong
spittle, fóe
squid, níròe
stab, ku
staff, ríto, rúng
stand, há (loeng)
stand, be at, rue
star, ha
star, falling, ha kúti
star, morning, féféhá
steal, yatà li
steam, papáng
stern, túfa
stick to, nawàng
stomach, húe
stomach, outer, húeró
stone for sharpening, bé
stone, wúng
stop (rain), pí
stop, hi ta lúe
storm, féng bápáli
story, ápí, húhú
straight hair, ta ékung
straight, tuelóelóe
straighten, Iú
strainer, coconut, rahé
string, àoule, ti
strong, náfeng
stutter, loepoe
stutterer, langue
mong
sufficient, pa
sugar glider,
female, púwa
sugar glider, male, púpí
sugar, rúngpóng
sugarcane, rùng
sun, ráng
Sunday, bang
nápang
héngtong
surprised, léngho
surrounded, longmung
sweet potato,
rángúeke
swell, hí wa
swim, pa pi
swollen, é ko tue

\section*{T}
tail, bèngro
tail, pú
Tami river, Pa ílong
Tanah Merah, Te Lángfa
Tangputo, Te Tangpúto
taro bete, nále
taro, manúa
tasty, sweet, langpí
tea, patá
teach, na lùng
teacher, ke bà ya na lung ili
teacher, kurù
tell, lóeng
tell story, lang
ten, náhìpa pa hìngtung
termite, hapùng
tern, tángáue, tángwà
testicle, òebi
thank you, ya héfèng pingping
that, fue a
the, a
the, ing a
the one, pí
their, tè te
there, fue a
they, te
thick, poe
thigh, front, bóengbà
thin, poe ka
think, húe oeng, loeng rang
think, loengfi
thirsty, kóeti ùepi e tue
this, wi a
thorn, kóng
thorny vine, kí
those two men, ke enake
those two, tenake, tenape
those two women, pe enake
thread, wíng
three, héngtong
throat, kóeti
thumb, nòmama
thunder, pítang pu i li
Thursday, bang nongpong
tide, high, tí hoe toe
tide, low, tí ko ti
tie, pi
tie together, hò pi
time, kúe
tired, ná pi
tobacco, rabáká, túlang
Tobati, Te Pa
toe, big,
làngmama
toe, little, langpúlong
toenail, lángbí
toes, middle, làngkangkang
together, lúe pa
tomahawk, tangmío
tomorrow, fé, féung
tongs, faráfong, fe hùefe
tongue, póeng
tooth, kóeng
torch, rawó
trap for pigs, já
tread, hue
tree kangaroo sp., púpúe
tree, rí, rítóe
tree species, bíng
tree species, péng
tree species, téngna
tree with air roots, bí
tree with edible grubs, ríótí
tree with straight leaves, nú
tree, string, epà
trick, li lue
trough for sago, lí
trousers, shirt, tànge ró
true, bamúa
truth, pí bamúa li
try, è na
Tuesday, bang hìngtung
turtle, moelíue
turtle, bug, móeí
turtle, mediumsized, moeláng
tusk, kang
twelve, hangpà
twenty four, mabírí
twin, kulílong
two, hìngtung

\section*{\(\mathbf{U} \mathbf{u}\)}
umbilical cord, kóengri
umbrella, kúfong
uncle, tití
uncle, wówo
uncle, aunt, kóko
under, kong
until, ka ing pa, ko, wa ko ra te, yù
urine, hipong
use, fa
utter, lá

V v
vagina, hùng
valley, hóeng
Vanimo, Máke
Vanimo, Te Yong
vegetables, pó
vertebrae, C-7,
kangtíngi
very, wò
village, bàme
voice, pína
vomit, yang

\section*{W w}
waist, tóeho
wait, hóeng
walk, ha
wall, fá, láho
wallaby, pumà
want, li
war, pìng
Waromo, Te Lú
wash, hí, pa hí, lo li
wasp, ibábúeli
water, pa
waterfall, pa ku i
li
wave, ó
wave, tíó
wave, small, tí
toto
we, ne
we two, amanè, anake, anape
weak, èkung
weak, nòepi
wear (hat), kepu
wear, ke fá ko li
weave, hà
weave, hu
Wednesday, bang
héngtong
weeds, hí
well, paí
well then, so
west, lo.wóng
west wind, wà
wet, já
whale, móehábá
what, -ha
what, thing, ya
when, rángnè
where, nè
while, jóka pa
whistle, hò li
white, tútú
whites, Te Ù eli
who, bá
why, ya te
why, ya toe ko
widow, bàro
wife, è(ne)
willy wagtail, tangrúerúe
wind, féng
wind, north, bibi
wind, south, fángfù
wing, fáng
wipe clean, yu
with, pa
woman, ueme
woman,
unmarried, pe
angúe
womb, kuha
wood, rí
woodchips, rílolo
work, yano
wound, píue
wrist, nòbero, nòkenge
write, puli
writing, pu
Wutung, Te Ó eti

\section*{Y \(\mathbf{y}\)}

Yako, Te Yákó
yam, óe
yam species, óemòe
yam, species, óewá
yawn, héng
year, félangro
year, last, félangro
te
year, next,
félangro a toe
year, this, félangro
wi a
yell, hì wá
yesterday + one, bàngto
```

yesterday + two, you (SG), mè your (PL), è e
fétangpiung
yesterday, bàng
you (PL), e
you two, enake,
enape
young, a
your (SG), mè me \quadZ z

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Z z
zigzag, fèmu

Further lexical material on the Skou language can be found in the downloadable Skou dictionary, listed in the references under Kemo et al.

\section*{Appendix 2. Verbal paradigms}

\section*{Types of verbal inflection}

Given that all verbs inflect by proclitic, and that the form of the proclitic does not show any variation from one verb to another, always appearing in the same shape, the only variable that this agreement marker shows is its placement with respect to adjunct nominals, which will be discussed in A2.4. The other inflectional devices, prefixation and vowel change, show more variation. A verb can select for inflection by prefixation or inflection by vowel alternation independently, as seen in table xx.

Table xx. Inflectional possibilities
\begin{tabular}{lcc}
\hline \hline & - Vowel change & + Vowel change \\
\hline - Prefix & A2.1.1 & A2.1.2 \\
+ Prefix & A2.2.1 & A2.2.2 \\
Suppletion & A2.3 & \\
\hline \hline
\end{tabular}

Examples of verbs that fit into these categories have been discussed in chapter xx.xx, and some representatives of each cell are shown in table xx.

Table \(x x\). Verbs illustrating different inflectional possibilities
\begin{tabular}{lcc}
\hline \hline & - Vowel change & + Vowel change \\
\hline- Prefix & \(e\) 'board' & moeng, mong, meng \\
& & 'sit' \\
+ Prefix & \(e\), me, ke, pe, ne, e, te & lúe, púe, lúe, rú, rúe, \\
& 'go east' & lúe, rí'hear' \\
Suppletion & A2.3 & \\
\hline \hline
\end{tabular}

The following sections will present many further examples of verbs that fit into each of these four categories.

\section*{A2.1 NON-PREFIXING VERBS}

The verbs that do not have a prefixing paradigm show a simple set of inflections, minimally consisting of the proclitic for subject, and in some cases also involving vowel alternations (see xx.xx for a discussion of the reference of vowel alternations in verbs). Both groups of verbs will be illustrated and listed here.

\section*{A2.1.1 Non-prefixing non-Vowel alternation verbs}

Verbs with no prefixation and no vowel alternations all show the same simple paradigm of proclitic agreement for subject; the phonological shape of the root does not affect the shape or presence of a clitic agreement marker. This has been described in xx.xx.xx and xx.xx.xx, and is completely regular. For this reason no listings of paradigms will be given, only examples of verbs that fit this description. For details on the morphology of proclitic inflection, see xx.xx.xx, xx.xx.xx and xx.xx.xx.
\begin{tabular}{llll} 
báng & 'crack' & nà oe & 'play' \\
bìue & 'watch over & moe & 'return' \\
bóe & 'fight' & moeng & 'sit' \\
\(e\) & 'board' & òe & 'jump' \\
è na & 'try' & ong fa & 'deceive' \\
fátí & 'lay down' & pa pi & 'swim' \\
fé & 'lay anchor' & pà & 'scratch' \\
fé & 'perch' & páng & 'chop (many)' \\
fé & 'place on a platform' & pé (i) & 'put down' \\
fí & 'meet' & peng & 'forget' \\
fue & 'cry' & pi & 'tie (sago thatch)' \\
fue & 'see' & pí & 'stop (of rain)' \\
fu & 'fear', & pí & 'flow out (of water)' \\
hí & 'wash' & pong & 'blow (at fire)' \\
hóe & 'go south' & pung & 'butcher' \\
húe oeng & 'think, feel' & rapu & 'rub' \\
jí & 'break' & rapue & 'descend' \\
jíng & 'open' & tajíng & 'push' \\
jíngpa & 'fly' & tóe \(l i\) & 'prepare' \\
ke fá ko li & 'wear (on arm)' & ùe pung & 'marry' \\
kéng re & 'go outside' & wá & 'plant' \\
kí & 'scream' & wang & 'die' \\
kúe & 'dig' & yang & 'vomit' \\
lemà pé & 'criticise' & yáng & 'sick,' \\
léngho & 'be surprised' & yatá & 'steal' \\
lúfi & 'cough' & yatà & 'buy, sell' \\
lú weng & 'sleep' & yú & 'search for'
\end{tabular}

\section*{A2.1.2 Non-prefixing verbs with vowel alternation}

Vowel alternation as a means of indicating either plurality or femininity of the subject (or, if the verb is bivalent, the object) has been described in xx.xx.xx. The different paradigms of alternations found, both regular and irregular, are listed in table xx . In this table non-alternating material that might be expected to show changes is shown in bold.

Table xx. Non-prefixing verbs that show vowel alternations
\begin{tabular}{|c|c|c|c|}
\hline \multicolumn{2}{|l|}{Base} & Feminine & Plural \\
\hline a walie & 'raise' & pu wa tue e & tu wa tie \\
\hline fu & 'afraid' & \(f u\) & \(f e\) \\
\hline fue & 'see' & fu & fi \\
\hline fue & 'cry' & fu & fue \\
\hline kúe & 'dig' & kúe & kí \\
\hline lú weng & 'sleep' & ló weng & lé weng \\
\hline moe & 'return' & moe & me \\
\hline moeng & 'sit' & mong & meng \\
\hline òe & 'jump' & ò & òe \\
\hline wang & 'die' & wang & wing \\
\hline
\end{tabular}

Some of the irregularities can be explained. It seems that there is a suppletive form of the verb for some categories, and in these cases the general verb, where it may be used, will not shown vowel alternations.

\section*{A2.2 PREFIXING VERBS}

While there are only five possibilities for prefixes on verbs in Skou, the fact that in most cases these have historically fused with initial consonants in the verb root (over \(80 \%\) of verbs in Skou are consonant-initial) means that the paradigms appear on the surface to be quite irregular.

\section*{A2.2.1 Prefixing verbs}

The majority of verbs in Skou show alternations that can be ascribed to underlying prefixes, and do not show vowel alternations. These have been described in chapter xx.xx.xx, where they were divided up into five classes on the basis of the apparent underlying onset (or lack of it) in the verb. Following the same classification into vocalic, bilabial, lateral, velar and glottal paradigms, table xx shows the members of each of the sub-classes for these paradigms. In each case the arrangement is from most to least frequently attested.

Table xx. Inflection by prefix
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline & 1SG & 2SG & 3SG.NF & 3SG.F & 1PL & 2PL & 3PL & Example members: \\
\hline \multirow[t]{2}{*}{Vocalic-a} & k & m & k & p & n & \(\emptyset\) & t & a 'carry' (optionally the same inflection as a 'raise'), ang 'eat' \\
\hline & \(\emptyset\) & m & k & p & n & \(\emptyset\) & t & a 'raise' \\
\hline \multirow[t]{2}{*}{-e} & n & m & k & p & n & \(\emptyset\) & t & e 'refuse' \\
\hline & \(\emptyset\) & m & k & p & n & \(\emptyset\) & & e 'go east' \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline -i & \(\emptyset\) & m & \(\emptyset\) & \(\emptyset\) & n & \(\emptyset\) & \(\emptyset\) & i 'stand' \\
\hline -0 & \(\emptyset\) & m & k & p & n & \(\emptyset\) & t & o 'go seawards' \\
\hline -oe & \(\emptyset\) & m & k & \(\emptyset\) & \(\emptyset\) & \(\emptyset\) & \(\emptyset\) & oeng 'remember' \\
\hline \multirow[t]{3}{*}{Bilabial} & w & p & w & w & w & w & w & \multirow[t]{3}{*}{\begin{tabular}{l}
wí 'get.F' \\
wung 'die' \\
hì wá 'call'
\end{tabular}} \\
\hline & w & w & w & p & w & w & b & \\
\hline & w & m & w & w & w & w & w & \\
\hline Alveolar & 1 & p & 1 & r & r & 1 & r & lóe 'shave', lúe 'hear', \\
\hline & & & & & & & & loe 'get.PL', nalùng 'teach', \\
\hline & & & & & & & & uu 'release', lóeng 'say', lúe 'chop up', nalu 'pound', \\
\hline & & & & & & & & lélúe 2 'annoy', loehí 'load', \\
\hline & & & & & & & & ì lú 'complain', kalèng 'look \\
\hline & & & & & & & & about', lóe 'pick fruit', lúefa 'exceed', lúhi 'hammer', \\
\hline & 1 & p & 1 & w & r & 1 & r & lo hí ‘hit', lá ‘roast', lèng 'hide self' \\
\hline & 1 & p & 1 & w & t & 1 & t & lang 'hit.F' \\
\hline & 1 & p & 1 & w & t & 1 & j & lang 'narrate' \\
\hline & 1 & p & 1 & w & y & 1 & y & làng 'chop.F' \\
\hline & 1 & p & 1 & w & 1 & 1 & t & lé 'fell' \\
\hline & 1 & p & 1 & w & 1 & 1 & 1 & lá 'utter', lèng 'be quiet', la 'erect fence' \\
\hline & 1 & p & 1 & t & t & 1 & t & li 'do', lí 'boil', li 'be angry at', \\
\hline & 1 & p & t & t & t & 1 & t & loe 'come', lélúe 'annoy' \\
\hline & 1 & p & 1 & p & r & 1 & r & leng 'hide' \\
\hline & 1 & p & 1 & p & t & 1 & t & loe 'work' \\
\hline Velar & k & b & k & w & k & k & k & ké 'get', ku 'stab', kepu 'wear hat', hèng ká 'accuse' \\
\hline & k & b & k & w & k & k & j & ká 'hit' \\
\hline Glottal & h & m & k & w & n & h & y & ha 'walk', há 'beat', há 'from', tahùng 'seat self', há hi \(_{2}\) 'count'. hù 'weave', ná hú 'paddle', hó 'peel', hi ta lúe 'halt' \\
\hline & h & m & k & w & n & h & j & há te 'close', nàhi 'hate', ráue há 'laugh', hóeng 'wait' \\
\hline & h & m & k & w & n & h & t & héng 'ask', ha lú 'pull', há 'stand' \\
\hline & h & m & k & w & n & h & h & hi 'go west' \\
\hline & h & m & k & w & b & h & y & hue 'tread on' \\
\hline & k & m & k & w & n & h & y & hung 'drink', \\
\hline
\end{tabular}

\section*{A2.2.2 Prefixing verbs with vowel alternation}

The following verbs, in addition to the prefixing patterns seen in table xx , also show inflection by means of vowel alternations.
\begin{tabular}{llll} 
hi ta lúe & 'halt' & lóeng & 'tell' \\
\(i\) & 'stand' & lúe & 'hear' \\
ì lú & 'moan' & lúe & 'chop' \\
kúre & 'fall' & lúefa & 'exceed' \\
le lue & 'lie to someone' & luhí & 'hammer' \\
lé & 'chop down' & oeng li & 'remember' \\
lélúe & 'annoy' & pílóeng & 'praise' \\
lóe & 'shave' & re & 'go' \\
lóe & 'pick (fruit)' & wung & 'die' \\
loehí & 'load' & ké & 'get'
\end{tabular}

The vowels that are found in the alternations are shown in table xx :

Table xx. Common vowel alternations
\begin{tabular}{|c|c|c|c|c|}
\hline & Plain & Feminine & Plural & Example verbs: \\
\hline \multirow[t]{8}{*}{Regular:} & i & ue & i & li 'do' \\
\hline & e & ue & 1 & \\
\hline & eng & ung & ing & leng 'give' \\
\hline & ue & u & i & lue 'hear', fue 'see', lue 'chop up', hi ta lúe 'halt', le lue 'lie to', lúefa 'exceed' \\
\hline & oe & ue & 1 & lóe 'shave', loehí 'load' \\
\hline & oeng & ung & ing & lóeng 'speak' \\
\hline & u & o & e & fu 'fear', lú 'sleep' \\
\hline & o & o & e & ko 'hide' \\
\hline \multirow[t]{4}{*}{Defective:} & e & e & i & ké 'get' \\
\hline & ue & ue & i & kúe 'dig', lélue 'narrate' \\
\hline & ue & u & ue & fue 'cry' \\
\hline & oe & ue & oe & lóe 'pick' \\
\hline \multirow[t]{10}{*}{Irregular:} & oeng & ong & eng & moeng 'sit', oeng 'remember' \\
\hline & oe & oe & e & moe 'return' \\
\hline & ung & ang & ing & wung 'die' \\
\hline & u & u & o & luhí 'hammer' \\
\hline & ang & ang & ing & wang 'die' \\
\hline & a & u & u & a wa lie 'raise', ká 'carry', háyu 'chase' \\
\hline & oe & o & oe & òe 'jump' \\
\hline & i & e & e & i 'stand' \\
\hline & e & i & , & lé 'fell' \\
\hline & u & u & i & ì lú 'complain' \\
\hline
\end{tabular}

\title{
A most agreeable language*
}

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}

\section*{1. Agreement and the notions of economy and redundancy}

In this paper I shall present data on multiple exponence from Skou, a language of New Guinea, and show that it presents problems for most accounts of inflectional morphology, because of the essentially unpredictable number of ways in which the same agreement features are realised on a given lexical item. Following a sketch of the historical situation that lies behind the Skou agreement system, similarities in Bantu nominal inflection are drawn and an argument is made for a templatic model of inflection that resides in the lexicon, dictating morphological choices.

Different theories of morphology and syntax treat the mechanism of agreement in different ways, both from each other and for different patterns of agreement (see, eg., Bresnan and Mchombo 1987, Andrews 1990, Jelinek and Demers 1994, Stump 2001, and many others, some of which are referred to later in this paper). Furthermore, most modern morphosyntactic theories avow some principle of economy, although the way in which such a principle is modelled varies between frameworks. What they do share is the basic assumption that languages employ the most economical set of morphemes needed to realise the meaning and grammatical features required. For instance, describing the way in which the Economy Principle works in the Minimalist Program (MP), Radford (1997: 505) states that it is:

A principle which requires that (all other things being equal) \({ }^{1}\) syntactic representations should contain as few constituents and syntactic derivations involve as few grammatical operations as possible.

In most work which claims to be 'within the spirit of the Minimalist Program', the syntactic relevance of a feature, such as agreement features ( \(\phi\)-features), tends to automatically generate a syntactic node in the structure describing the construction (for instance, the use of \(\mathrm{Agr}_{S} \mathrm{P}\) and \(\mathrm{Agro}_{0} \mathrm{P}\) for the checking of subject and object agreement features, in Lasnik (1999), among others). The Minimalist framework thus leans strongly towards an incremental model of morphology, since lexical roots acquire morphological features through checking at different nodes (see section 4.1.2). If we turn to LexicalFunctional Grammar (LFG), we also find a principle of Economy of Expression, but given the lexical integrity principle ('words arrive in the syntax fully inflected'), it produces quite different results from those in the MP. The Principle of Economy of Expression applies only to syntactic nodes, not to the inflection of individual words (Bresnan 2001a). This implies that LFG is not, from its own internal architecture, strictly associated with either an incremental or

\footnotetext{
* I would like to thank the UNESCO Endangered languages fund for financial support. Cathryn Donohue, Rolf Noyer and a couple of anonymous reviewers have greatly contributed to the coverage and intelligibility of this paper; errors of judgement remain my own. Greatest thanks are due to many of the people of Skou-Mabo and Skou-Yambe, and informants all along the Vanimo coast, who have been part of the historical research.
1 Which presumably means that the informational and pragmatic content is identical - MD.
}
realisational model of morphology. LFG makes use of unification principles, which are somewhat unbounded in terms of morphological predictions.

More specifically morphological accounts of inflection also address the more specialised issue of redundancy. Anderson's (1982) Elsewhere condition states that we should expect the appearance of more explicit morphemes at the expense of less explicit ones, when both are compatible with the features we wish to parse. Addressing the application of morpheme selection and morphological blocking in LFG, Andrews (1990) describes the Morphological Blocking Principle within the framework of Lexical Functional Grammar; an Optimality Theoretical account of similar phenomena is provided in Bresnan (2001b).

Morphological Blocking Principle (within the framework of LFG):
If a lexical item L appears in a c-structure position P corresponding to an f-structure F, and there is another lexical item L' whose specifications are subsumed by those of L but subsume those of F , then the structure is blocked
(Andrews 1990: 507)
In essence, the Morphological Blocking Principle stipulates that the most highly specified element which can be used in a given context must be used. From a morphological perspective, Andrews' formulation is functionally identical to Anderson's. In informal terms, Ortmann (1999: 77) states the morphological position: 'inflectional affixes must always contribute additional information.' This is modelled in different ways in different frameworks: Distributed Morphology assumes that features, once assigned adequately to a morpheme, are discharged and no longer relevant. Noyer (1997: 99) explicitly states that '[the] inflectional feature \([\alpha \mathrm{F}]\) may not attach to a stem bearing \([\alpha \mathrm{F}] \ldots\) Where discontinuous bleeding occurs, an affix realizing a feature F will not appear if F has been realized by another affix at some position of exponence in the form.' Problems that arise with this model, and other current models, are discussed with in section 4.

Wunderlich and Fabri (1995: 262) state that 'the output information must not be contained in the input', thereby assuring that any morphological units must contribute additional meaning. Stump \((1993,2001)\) has claimed that the presence of zero information load bearing morphology in Chichewa constitutes a counter to these principles, and an argument for a realisational model of morphology; this is discussed in section 4.2.3.

In this article I shall present data on verbal agreement from Skou that suggests that a purely grammatical (morphological or syntactic) account of inflection does not adequately model the idiosyncrasies of agreement in the language, and that the lexicon needs to be considered as an important stipulator in the process of assigning inflectional affixes. After an explication of verbal agreement in Skou I show that there are not semantic, syntactic or phonological factors behind the variation, which we must thus assume to be lexically determined. The problems this raises for earlier models that have skirted on the notions of multiple exponence and redundancy are discussed in some detail, followed by a historical explanation for the current state of affairs in Skou. I conclude by offering a lexical template model of the variation that we have examined, suggesting that the lexicon must be given a greater role in modelling these irregularities. This is independently motivated with data from noun classing in Bantu languages.

\section*{2. Skou}

The Skou language is known from the work of Cowan (1952a, 1952b, 1957), Galis (1955), Voorhoeve (1971, 1975 and elsewhere), and briefly Donohue (2000). It has been referred to as Sko, Skou, Səkou, and Tumawo, and is referred to locally as Te Máwo pílang ne ne ('Our, the Mabu people's, language'). Skou is related to other languages in the Skou family of which it is the westernmost member, stretching across the north coast of New Guinea, extending past Vanimo to Leitre. \({ }^{2}\) The language is spoken with minimal dialectal variation by the inhabitants of three villages, Skou-Yambe, Skou-Mabu and Skou-Sai, in the centre of the north coast of New Guinea (in Papua, formerly Irian Jaya; see Silzer and Clouse 1991). This is shown in figure 1.

Figure 1. The Skou villages and other features west of the Tami River


There are 700 speakers of the language, almost exclusively in these three villages. Although the name Te Máwo pílang ne ne is used by speakers to refer to their own language, the name Skou is acceptable, and recognised as the 'official' way to refer to their language. \({ }^{3}\) I shall refer to the language as Skou, following linguistic references to the language and speaker preference.

The materials presented here were collected by the author in 1998-2002, from people in Skou-Mabo and Skou-Yambe, while working on a cultural preservation project based in those villages. The materials reported here represent the conservative speech of Skou people from all three Skou villages, and are acceptable to all speakers with an active command of the language.

\footnotetext{
2 More distant relations can be established with other members of the Macro-Skou family (including, but not confined to, Krisa (I'saka), Rawo, Puari, and Warapu (= Barupu)), albeit in a substantially different arrangement to Laycock's \((1973,1975)\) family tree. These more distantly related languages have morphological structures significantly different to those exemplified in Skou and the other languages discussed in section 4.3.
3 The name Sekou is the name used in Tobati, the western neighbour of Skou, to refer to the language and its speakers. The spelling Skou has become (along with Skouw and Skow, showing pseudo-Dutch influence) the standard spelling of this word in Indonesia, though linguistic works changed to Sko after 1971.
}

Skou \({ }^{4}\) is typical of many Papuan languages in displaying a basic SOV word order, and only somewhat unusual in maintaining this order strictly, even when real-word semantics would allow for an unambiguous interpretation (this appears to be a feature of languages of the North New Guinea coast). \({ }^{5}\)
\begin{tabular}{llll} 
Áì & \(k e\) & tà & keyúyú. \\
father & 3SG.NF & bow & he:search.for
\end{tabular} 'Father is looking for the bow.'
\[
\begin{array}{rlll}
\text { * Tà } & \text { ál̀ } & \text { ke } & \text { keyúyú. }  \tag{2}\\
\text { bow } & \text { father } & \text { 3SG.NF } & \text { he:search.for }
\end{array}
\]
(further morphological analysis of the verbs in (1) - (3) is possible, but is not relevant for the point being made here; more explicit glossing of verbal morphology is introduced in section 3.3)

Even when the only interpretation allowed by the word order is nonsensical, this is the only grammatical interpretation allowed for the sentence:
(3) Tína peùeme pepang.
salt woman she:ate
'The salt ate the woman.'
* 'The woman ate the salt.'

Only topicalisation can give such a sentence a pragmatically plausible interpretation (see 3.1, examples (15) - (18)) and this is unlikely with a non-human object such as tína in (3). In most other respects Skou is not a typical Papuan language. It lacks reflexes for almost all of the Papuan cognate sets proposed by, for instance, Pawley (1995, 1997, 1998), and most of the morphological and phonological features that have been put forward as typical of Papuan languages (as opposed to Austronesian ones) (eg., Haiman 1980, De Vries 1993, Foley 1998) do not apply to Skou, or to other languages in the Skou family. The following section describes the means by which subject is marked on the verb in Skou.

\footnotetext{
4 Skou has a fairly simple segmental phonology, with 13 consonants and 7 vowels, arranged in strictly (C)V syllables (sequences of two vowels are always pronounced as two separate nuclei, and may carry separate tone melodies, such as áì 'father'). Nasalisation is contrastive on vowels, as are five word-level tones (only three patterns surface on monosyllables). Tone and nasalisation contrast in the following sextuple: low tone, t.t. 'hair', tã 'canoe'; high tone, ta 'kunai grass', tã 'bird'; falling tone, ta 'arrow' and tã 'machete'. Examples are presented in Skou orthography: nasalisation is indicated by a following -ng, \(\mathbf{z} /\) and \(/ \boldsymbol{a} /\) are written with the digraphs \(u e\) and \(o e\). The representation of consonants follows IPA conventions, except that \(y\) represents \([\mathrm{j} \sim 3 \sim \mathrm{dz} \sim\) \(\left.\mathrm{d}_{5}\right]\) (in a cline from younger to older speakers), and \(j\) represents [ 9 ) \(\left.\sim \mathcal{I}\right]\) for older speakers, and [ \(\mathrm{d}_{5}\) ] for younger ones. High pitch is shown with an acute accent ', falling pitch with a grave accent ', and low pitch is left unmarked. Low tone marking past tense is not written, except in section 4.1.4.
5 The following abbreviations have been used in glosses. Portmanteau agreement markers use the following abbreviations: 1, 2, 3: first, second and third person; SG, PL: singular and plural number; F feminine; NF non-feminine; DAT dative; DEF definite; DEIC deictic; POSS possessive. The other glosses used are: AN, animate; NEG, negative; OBJ, object; OBV, obviate; PROX, proximate; RED, reduplication; SUBJ, subject. In languages other than Skou the following additional abbreviations appear: ABS absolutive; ACC accusative; CL class marker; CONC (verbal) concord marker; DET determiner; GDR gender; GEN genitive; HEAD agreement with relative clause head; IMP imperative; LOC locational; NONHUM non-human class; PERS person; QUAL (adjectival) agreement marker.
}

\section*{3. Skou verbs}

The verb in Skou is usually a single syllable of the form (C) \(\mathrm{V}+\mathrm{T} \pm \mathrm{N}\), that is, a consonant (optional but normal), a vowel, a tone and a choice of nasal or oral production of the vowel. While there is a reasonable number of unanalysable multisyllabic noun roots (such as naké 'dog', kungpáue 'spider, octopus' or ìngno 'banana'), multisyllabic verb roots are rare (less than \(10 \%\) of the known verbs; see 3.6 for listings). When a verb does consist of more than one syllable, usually one or more of the syllables is an easily discernible adjunct nominal, \({ }^{6}\) or the auxiliary verb. Although these verbs present complications for a description of the patterns of agreement, they do not affect a list of the different types of agreement phenomena. We can distinguish four broad categories of verbs, on the basis of the kind of subject agreement patterns they display.

The four means of marking \(\phi\)-features of the subject of the verb on the verb itself are:
1. Pronominal agreement clitic, obligatory on all verbs;
2. Vowel alternations to show a limited range of features on the verb, as well as a pronominal agreement clitic;
3. Consonant alternations to show a full paradigm of feature agreement, as well as a pronominal agreement clitic;
4. A combination of some of the above.

It is when we find combinations of these, especially 1 . and 3., which are the most common pattern in the language, that analytical problems arise. The forms of these different patterns are discussed in turn in the sections that follow.

\subsection*{3.1 PRONOMINAL CLITIC AGREEMENT}

There is a set of verbs that show agreement with the subject \({ }^{7}\) through the use of pronominal clitics. \({ }^{8}\) These verbs are the simplest of all, and show no alterations in the form of the root; examples of these verbs are moeng 'stay', (pa) pi '(water) swim', (pa) hi' '(water) wash', jí 'close, break', wung 'die', \(f i\) 'meet' (here and elsewhere verbs are cited in the form given for 2PL subject, which is close if not identical to the root form of the verb.). Despite not altering

\footnotetext{
6 I use the term 'adjunct nominal' following Foley (1986: 117) to refer to the process common in non-Austronesian languages of New Guinea which lack an extensive array of verb roots. An adjunct nominal is taken to be any N ( not NP ), maximally an \(\mathrm{N}^{\prime}\), that appears in a fixed position adjacent to the verb, cannot be separated from it. Furthermore, in the case of transitive verbs, the presence of the adjunct nominal does not inhibit the appearance of a true object. Ross (1980) discusses criteria for identifying adjunct nominals (which he calls 'verbal complements') in Vanimo, citing the semantic unrestrictedness of the verb without the specifying nominal, and the frequent cooccurence of the two lexemes without independent existence as identifying traits. A more theoretical discussion can be found in Mohanan (1995, 1997).
7 I use this term in the traditional sense of an \(\mathrm{S}+\mathrm{A}\) grouping.
8 These morphemes are described as clitics, rather than prefixes, because of their variable behaviour with respect to adjunct nominals (see sections \(3.2,4.4\) ), ability to attach to words of more than one syntactic category, and their phonological independence from the verb root, compared to prefixes (cf. Zwicky and Pullum 1983). The term is not intended to imply any particular morphosyntactic status, such as that enjoyed by pronominal clitics in Romance languages.
}
the root in any way to show agreement with the subject, these verbs must appear with a proclitic that agrees in number with the subject.
```

* Peangku fue a wung.
girl that die
'That girl died.'

```
(5) Peangku fue a pe=wung girl that 3SG.F=die 'That girl died.'

Cowan describes his data consistently with this analysis. Voorhoeve challenged Cowan's claim that the pronouns (= clitics) must appear immediately preverbally, based on an interpretation of some sentences as involving the structure PRO [P NP] V, with the pronoun separated (1971: 55). These sentences are in fact serial verb constructions, not preposition phrases (which would be unlikely given the languages V-final word order, and use of postpositions elsewhere). Voorhoeve's other data suggests the clitic analysis, including his remark that word order is SOV with nominal subjects, but OSV (that is, O \(\mathrm{S}_{\text {clitic }}=\mathrm{V}-\mathrm{MD}\) ) with pronouns.

When the subject is pronominal, an identical pattern emerges: the clitic pronoun can appear on the verb with a free pronoun (identical in phonological shape), but that the clitic pronoun alone is not sufficient to ensure a grammatical sentence.
(6) \#/* Pe=wung

3SG.F=die
In order to present a grammatical sentence, the subject must be overtly present as a separate noun phrase, even if that noun phrase consists only of a pronoun:

Pe pe=wung.
3SG.F 3SG.F=die
'She died.'
This preference for an independent pronoun is so strong that even when the clitic pronoun and the preverbal (object) NP do not match categories, a sentence-initial object NP will be interpreted as a subject in the absence of another NP that could possibly be interpreted as the subject. As an example of this preference, in the preparation of literacy materials the following sentence was presented in the draft version of a book:
```

Táng hìngtung pe=fe.
bird two 3SG.F=see.AN.PL.OBJ
Intended reading: 'She saw two birds.'

```

This string of words was, however, consistently interpreted with the NP táng hìngtung 'two birds' as the obligatory DP subject, and so the subject clitic was changed by speakers from the singular feminine \(p e=\) to the plural \(t e=\), as follows:
(9) Táng hìngtung te=fe.
bird two 3PL=see.AN.PL.OBJ
'Two birds saw (something).'
In order to achieve the intended reading, the sentence had to be changed to that shown in (10), with an overt free pronoun pe.
(10) Pe táng hìngtung \(p e=f e\).

3SG.F bird two 3SG.F=see.AN.PL.OBJ
'She saw two birds.'
Only in this case was the proclitic on the verb correctly interpreted as referring to an argument other than the two birds. With first or second person clitics this restriction is relaxed somewhat, and sometimes the clitic pronoun alone is sufficient for a grammatical reading (especially with the singular nì and \(m \grave{e}\) ). While nonetheless grammatical, speakers prefer free pronouns to be present in addition to subject clitics. The following clause was taken from literacy materials used in Skou; the sentence was changed from an earlier version without the initial pronoun, Ya ne nang loeng pa, ..., to the version in (11) with a free pronoun, a clitic pronoun, and verb-stem agreement through consonant prefix (see section 3.3 for further discussion).
(11) Ne ya ne=n-ang loeng \(=p a, \ldots\)

1 PL thing \(1 \mathrm{PL}=1 \mathrm{PL}-\mathrm{eat}\) finish=INSTR
'When we have finished eating, ....'
(12) \# Ya ne=n-ang loeng pa, ...

These data are evidence that the clitic pronouns are simple agreement markers, and are not pronominal in nature. The clitic pronouns have the same basic form as the free pronouns (though with reduced vowel variants in most cases), but none of the positional freedom of the latter. They must appear immediately preceding the verb root (or verb + adjunct nominal 'compound' - this is further elaborated in sections 3.2, 4.1.2 and 4.2.2) and, for the low-tone pronouns, they may optionally have reduced forms with schwas instead of \([\varepsilon]\) as the vowel. Other nominals, and even free pronouns, lack these features.

The following sentences show that the clitic \(p e=\) can occur with a reduced vowel, whereas the free pronoun cannot. Furthermore, the free pronoun may appear either as the appositional pronoun in an ergative NP, or as the sole member of a DP.
(13) Pe=angku pe naké pe=yúyú. [peaņku pe nake pedzudgu]

3SG.F=child 3SG.F dog 3SG.F=search for * [pearfku pe nalse pedzudgu]
'The girl is looking for the dog.'
\begin{tabular}{lr} 
Pe naké pe=yúyú. & [pe nake pedzudzu] \\
3SG.F dog 3SG.F=esearch for & [pe nake padjudzu.] \\
'She is looking for the dog.' &
\end{tabular} 'She is looking for the dog.'

It could be argued that the free pronouns are adjoined to the clause as representatives of a pragmatic discourse function independent of the pronominal marking on the verb (as per Bresnan and Mchombo 1987, Jelinek and Demers 1994). Pronouns, being inherently definite in Skou (a thesis supported by the fact that there are no indefinite or negative pronouns such as 'noone', 'nothing' or 'someone'), are, under this view, also inherently topical, and so appear in a clause-external topic position (cf. Aissen 1992). There is in fact such a position in Skou, seen in (15), in which pe Loisa a and pe Maria a are contrastive topics:
(15) Pe Loisa a, te=angku-pè=pe héngtong;

3SG.F Loisa DEIC 3PL=child-3SG.F.POSS=3SG.F.DAT three
\begin{tabular}{llll} 
pe & Maria & a, \(\quad\) te=angku-pè \(=p e\) & \(k a\) \\
3SG.F & Maria DEIC & 3PL=child-3SG.F.POSS=3SG.F.DAT & NEG \\
'Loisa, she has three children; Maria, she has none (yet).' &
\end{tabular}

It cannot be argued, however, that the appearance of sentence-initial free pronouns such as that in (14) is an instance of topicalisation when they are represented on the verb in the form of clitics and agreement prefixes. We can show this by examining sentences with topicalised nominal objects which still maintain an independent subject DP, such as (16), with te Óeti 'those Wutungs' as subject:
(16) Í nápang héngtong \(a\), te Óeti fue a te=fe hápèng. snake five three DEIC 3PL Wutung that 3PL=see.PL bush 'Seven snakes, those Wutung people saw them in the bush.'
(seven is expressed as five + three in Skou, which uses a mixed base-eight/basetwelve counting system)

When the subject of the sentence is pronominal, then the subject is still shown with a free pronoun in addition to the verbal morphology. Adapting sentence (10), we have the following example with a topicalised object and a pronominal subject. The presence of a free pronoun is obligatory, in the normal sentence-initial position. Since the topic position is taken with the phrase táng hingtung fue \(a\), the free pronoun cannot be an instantiation of a topic referring to a bound clitic pronoun \(p e=\) on the verb.
(17) Táng hingtung fue \(a\), pe \(p e=f e\).
bird two that 3SG.F 3SG.F=see.AN.PL.OBJ
'Those two birds, she saw them.'
(17)'

(18) * Táng hìngtung fue \(a, p e=f e\).

An alternative analysis in which the free pronouns are assumed to appear in a clauseexternal focus position is untenable on the grounds that there does not appear to be such a structural focus position; Wh-question words appear in-situ, as can be seen by examining these sentences which appear with either subject or object questioned and no change in word order.
\begin{tabular}{lll} 
Bá mè \(\quad\) ong & \(k e=k-e ?\) \\
who 2SG refusal & 3SG.NF=3SG.NF-refuse \\
'Who refused you?' &
\end{tabular}
\begin{tabular}{lll} 
Mè \(\quad\) bá \(\quad\) ong \\
2SG who refusal & \(m \grave{e}=m-e ?\) \\
'Who did you refuse?'
\end{tabular}
* Bá mè ong mè=m-e?

It is clear that the language exhibits a form of agreement by clitics, which do not supply a pronominal feature themselves, but which are purely agreement markers. The full set of clitic pronominal markers is given below.
\begin{tabular}{lll} 
& SG & PL \\
1 & \(n \grave{l}\) & \(n e\) \\
2 & \(m e ̀\) & \(e\) \\
3.NF & \(k e\) & \(t e\) \\
3.F & \(p e\) &
\end{tabular}

The same forms are also used for free pronouns, though, as stated above, the clitic pronouns apart from nì and mè may appear with a reduced vowel [ \(\xi\) ], rather than [ \(\varepsilon\) ] (there is no gender distinction in the nonsingular verb forms). Additionally, free pronouns also distinguish several dual categories: amane 1DU.IN, anake 1DU.EX, anape 1DU.EX.F, enake 2DU, enape 2DU.F, tenake 3DU, tenape 3DU.F. These are not distinguished on the clitic sets, where dual free pronouns are marked as part of the non-singular category. An equivalent of (11) with dual subject would be Amane ya ne=n-ang loeng, 'We had both finished eating.'

Another phenomenon where similar redundancy is observed is possession, in which the possessive pronoun is suffixed to the possessed noun, and is in turn followed by the dative form of the pronoun.
(23) naké-ké=ke
\[
\begin{aligned}
& \text { dog-3SG.NF.POSS=3SG.NF.DAT } \\
& \text { 'his dog' }
\end{aligned}
\]

Although the use of the dative pronoun alone would supply all the feature information necessary to fully specify the possessor, this is not grammatical: the possessive pronoun is required as well. \({ }^{9}\) Equally, the possessive pronoun cannot occur alone, but must appear in conjunction with the dative.
```

* naké=ke
dog=3SG.NF.DAT

```
* naké-ké
dog-3SG.NF.POSS
We shall not examine the paradigm of possessive constructions in any more detail here, since they do not add any information to the description of verbal agreement.

\footnotetext{
9 A small set of inalienable nouns must always appear with the possessive pronoun. These nouns are: bápá(ne) 'friend', è(ne) 'wife, daughter in law', í(ne) 'father in law, son in law', là(ne) 'mother in law', páng(ne) 'husband', tà(ne) 'daughter in law', yá(ne) 'sister', yu(ne) 'brother', héng(me) '(someone else's) brother/sister in law', má(me) '(someone else's) mother', re(me) '(someone else's) father', and yaramenà(ne) 'song' (shown with -ne 1SG.DAT or -me 2SG.DAT). When used to indicate a possessed item, they appear with the normal possessive pronoun and an additional dative pronoun.
}

We have seen in this section that Skou has a pattern of pronominal agreement markers which, like the agreement markers in Germanic languages, cannot be analysed as incorporated pronouns. \({ }^{10}\)

\subsection*{3.2 VowEL CHANGES: SUBJECT AGREEMENT}

With some verbs the person, number and gender of the subject is (partially) marked by means of alternations in the vowel of the verb. If there is any alternation, the third person feminine subject will always be affected, but, in the example below, third person plural is also affected. Feminine inflection involves rounding and backing, and plural inflection fronting. In lú weng, lú is the adjunct nominal 'eye', and weng is the uninflecting verb 'sleep'.
\begin{tabular}{lll} 
'sleep' & SG & PL \\
1 & lú weng & lú weng \\
2 & lú weng & lú weng \\
3.NF & lú weng & lé weng \\
3.F & ló weng &
\end{tabular}

Note that it appears that the vowel-change agreement applies to the [adjunct nominal + verb] unit in this case; it is the vowel of lú that changes, not that of the verb weng. This is not a generalisation that applies to all verbs with adjunct nominals; for instance, with lú 'release' (whose homophony with the lú in 'sleep' is purely coincidental) the adjunct nominal ping 'arrow' is used to build the meaning 'shoot at someone', but there is no alternation in the form of ping.

The vowel alternations in (26) differentiate special forms for the 3SG.F and the 3PL forms. Other verbs, such as fue 'see', show different divisions. With fue 'see' the 3SG.F is uniquely different to the other members of the paradigm, as is the case for 'sleep', but rather than having a unique 3PL form there is a special form for all plural persons.
(27) \begin{tabular}{llll} 
'see' & SG & PL \\
1 & \(f u e\) & \(f i\) \\
2 & \(f u e\) & \(f i\) \\
& 3.NF & \(f u e\) & \(f i\) \\
& 3.F & \(f u\) &
\end{tabular}

\footnotetext{
10 I have described pronominal clitics as being obligatory on all verbs; there is in fact one condition in which no clitic appears on the verb. When the subject of an intransitive verb is 1DU.IN, the clitic may optionally be omitted. For instance, for the translation equivalent of 'We sat.', the normal construction would be
(i) Amane ne=ta n-ùng.

1DU.IN 1PL-sitting 1PL-sit
In addition to this, there is an alternative Amane ta nùng. This is only found with intransitive verbs with the 1DU.IN pronoun; a transitive sentence, or one with any other pronoun (including the other 1DU forms: anake 1DU.EX, anape 1DU.EX.F) requires the pronoun: Anake ne ta nùng, * Anake ta nùng. I suggest that this apparent exception confirms the obligatoriness of the clitics: the only circumstance in which the clitic may be dropped is when a more semantically specified pronoun with an identical last syllable to the clitic immediately precedes it; in this case, a purely phonological reduction of two otherwise identical adjacent syllables occurs.
}

These verbs must also appear with the pronominal clitics described in section 3.1; the alternation of the vowel alone is not sufficient to indicate the subject. Examples of both these verbs are given below, as well as sentences illustrating the different position of the adjunct nominal pìng 'arrow' with lú 'release'. In the first two sentences we can see that the gender of the person is indicated not only by the verbal proclitic, but also by the change in the vowel of the adjunct nominal. \({ }^{11}\)
\[
\begin{align*}
& \text { Ke=angku ke=lú weng. }  \tag{28}\\
& \text { 3SG.NF=child 3SG.NF=eye sleep } \\
& \text { 'The boy is sleeping.' }
\end{align*}
\]
\[
\begin{align*}
& \text { Pe=angku pe=ló weng. }  \tag{29}\\
& \text { 3SG.F=child 3SG.F=eye.F sleep } \\
& \text { 'The girl is sleeping.' }
\end{align*}
\]

In the following sentences we can see that the gender of the subject is reflected in the choice of vowel of the verb 'see', which additionally requires the proclitic, and a free pronoun.
(30) Ke móe \(k e=f u e . \quad\) * Móe \(k e=f u e\), * Ke móe fue.

3SG.NF fish 3SG.NF=see
'He saw a fish.'
(31) Pe móe pe=fu. * Móe pe=fu, * Pe móe fu.

3SG.F fish 3SG.F=see.F
'She saw a fish.'
The next two sentences show the alternative position of the adjunct nominal; in sentences (28) and (29) the adjunct nominal lú appears between the agreement proclitic and the verb. In the sentences below, however, the adjunct nominal ping must appear before the proclitic.
ADJUNCT.NOM CLITIC= V
Nì pe ping \(\quad\) nì=lú.
1SG 3SG.F arrow
1SG=release
'I shot her.'
(33) Pe nì pìng pe=rú. * Pe nì pe=pìng lú, * Pe nì pe=pìng rú, 3SG.F 1SG arrow 3SG.F=3SG.F:release
'She shot me.'
(see also section 4.2.2)
We can see that in these sentences the subject is indicated by the vowel alternations on the verb root itself, and also by the proclitic agreement markers. Other verbs require indication of subject by changes in the initial consonant of the verb.

\footnotetext{
11 It is worth noting in an aside that the male and female children (and some other kin terms) are differentiated only through the use of the pronominal clitics; a plural 'children' is formed with Te angku, and indeed any human NP, preferably subject, can appear with the appropriate pronoun heading it. This phenomenon, seen in (29) and (30) is expected both within the language and within a New Guinea linguistic context.
}

\subsection*{3.3 CONSONANT CHANGES: SUBJECT AGREEMENT}

Consonant alternation is a frequent pattern of subject agreement on most verbs. Representative examples of these consonant alternations are given below; the consonant patterns are not entirely regular, with different consonants appearing with different verbs to mark the same \(\phi\)-features. \({ }^{12}\) In contrast to the verbs that show agreement solely through the presence of pronominal clitics, verbs with consonant alternations are highly restricted in terms of their onset: only verbs with the consonants \(k h w l\), or one of the vowels \(a o\) or \(o e\), are found. Representative examples of the different verb conjugations are given below:
\begin{tabular}{llllllll} 
(34) & 'catch' & 'close' & 'get F ' & 'chop' & 'eat' & 'seawards' & 'underlying' prefix \\
1SG & ké & há & wé & làng & kang & \(o\) & Ø-, k -, \(\mathrm{n}-\) \\
2SG & bé & má & pé & pàng & mang & mo & \(\mathrm{m}-\) \\
3SG.NF & ké & ká & wé & làng & kang & ko & \(\mathrm{k}-\) \\
3SG.F & wé & wá & wé & wàng & pang & po & \(\mathrm{p}-\) \\
1PL & ké & ná & wé & tàng & nang & no & \(\mathrm{n}-\) \\
2PL & ké & há & wé & làng & ang & \(o\) & Ø- \\
3PL & ki & yá & wé & yàng & tang & to & \(\mathrm{t}-, \mathrm{y}-\) \\
ROOT: & ké & há & wé & làng & ang & \(o\) &
\end{tabular}

Although the patterns shown in (34) represent typical inflectional paradigms, there is considerable idiosyncrasy in the system. The two vowel-initial roots in (34), ang 'eat' and \(o\) 'go seawards' show different forms for the 1SG cell, for instance see the discussion in 4.3. With \(l\)-initial roots, we see the widest variation:
\begin{tabular}{lllllllll} 
& 'cook' & 'hit F & 'chop' & 'hide TR ' & 'burn' & 'come' & 'release' & 'hear' \\
1SG & lá & láng & làng & wì leng & li & lòe & lú & lue \\
2SG & pá & páng & pàng & wì peng & pi & pòe & pú & pue \\
3SG.NF & lá & láng & làng & wì leng & ti & tòe & lú & lue \\
3SG.F & wá & wáng & wàng & wì weng & tue & tòe & rú & rue \\
1PL & rá & táng & tàng & wì teng & ti & tòe & rú & rue \\
2PL & lá & láng & làng & wì leng & \(l i\) & lòe & lú & lue \\
3PL & rá & jáng & yàng & wì reng & ti & tòe & rú & rue \\
ROOT: & lá & láng & làng & wì leng & \(l i\) & lòe & lú & lue
\end{tabular}

Although 1SG, 2 SG and 2PL show consistent consonantal patterns, the other persons show considerable variation: 3SG.NF appears as \(l\) - or \(t-\); 3 SG.F appears as \(w-, t\) - or \(r-; 1 \mathrm{PL}\) can be \(t-\) or \(r\)-; and 3PL shows \(t\)-, \(r\)-, \(j\) - and \(y\) - agreement morphemes. Synchronic regularity is elusive (see further discussion in section 4.3). Alternations of the sort seen in (34) and (35) are found

\footnotetext{
12 The apparent underlying patterns in the data do, however, suggest an abstract analysis of prefixation and assimilation of a consonantal element that is (historically, at least) prefixal to the verb stem. Ross (1980), summarised in Foley (1986: 133-134), offers a presentation of this view for the related language Dumo (Vanimo); Wutung, Dusur and Leitre, close relatives of Vanimo, display similar paradigms (see section 4.3). Skou is less regular Dumo and the other eastern languages.
}
in the majority ( \(68 \%\) ) of Skou verbs, and may be considered a regular agreement pattern, despite the somewhat unpredictable nature of the consonant changes (possible alternatives are discussed in section 4.1). Note that, when used in natural speech, these verbs too must appear with a pronominal clitic as well as a free nominal subject, as seen in (36).
(36) \(P e \quad\) è \(p e=w e ́ . \quad\) * Mè wé, * Mè \(p e=w e ́\).

3SG.F 2SG 3SG.F=3SG.F:catch
'She caught you.'
These verbs also show subject agreement with more distinctions made than the verbs showing alternations in the vowel. Despite this more complete paradigm of alternations, these verbs still require pronominal proclitics for the subject, in addition to a free DP subject, in order to be part of a grammatical utterance. We thus have a paradigm which requires double marking of the arguments that show agreement, with, crucially, the informational content in the different agreement morphemes identical. None of the agreement markers, either prefixal or proclitic, are portmanteau forms of (for instance) tense \(+\phi\) features, and neither are they dependent on a particular configuration of these grammatical features to appear: both of these are always compulsory. It follows that we could not argue that one of the instances of the appearance of pronominal information was simply a tense, or aspect, or other function, marker, with suppletive forms for person, number and gender (see sections 4.1, 4.2). Furthermore, in no case are the \(\phi\)-features of an argument broken up into separate morphemes with, for instance, person indicated by one morpheme, number by another, and gender by a third. \({ }^{13}\) Both of the agreement markers in Skou parse exactly the same set of features.

\subsection*{3.4 CONSONANT AND VOWEL CHANGES FOR SUBJECT}

Some verbs combine the elements seen in 3.2 and 3.3 to produce a paradigm that shows considerable redundancy in the marking of subject features in the verb complex. An example of this can be seen in the verbs lóe 'shave' and lóeng 'tell, order, promise, persuade'. These verbs display the consonant alternations seen in 3.3 with vowel alternations of the type seen in 3.2.
(37) \begin{tabular}{llllll} 
'shave' & SG & PL & 'tell' & SG & PL \\
1 & lóe & róe & 1 & lóeng & lóeng \\
2 & póe & lóe & 2 & póeng & lóeng \\
3.NF & lóé & rí & 3.NF & lóeng & níng \\
3.F & rúe & & 3.F & núng &
\end{tabular}

13 An example of agreement through multifunctional affixes, and the split of agreement markers for one argument into two morphemes with different features, can be seen in the following Kiwai sentence (Foley 1986: 129, from Ray 1933):
(i) Nei sirio moni g-iiri-ti-ru-mo.
they plenty money 2/3PAST-put.in-REP-PAST-PL.SUBJ
'They put several pieces of money in.'
In this sentence the first prefix \(g\) - indicates the person of the subject, and is a portmanteau morpheme also showing past tense. The number of the subject is indicated by the final suffix -mo, showing non-singular number. The exponence for this 3PL subject is thus split into number marked as suffix to the verb (the primary exponent), and person values marked on a tense prefix.

As might be expected, these verbs too require the full panoply of subject proclitic and free nominal subject in order to be grammatical. In example (38) we see the subject referred to by four morphological means:
1) the regular use of the free pronoun \(p e\);
2) the regular use of the subject proclitic \(p e=\);
3) the regular choice of the initial \(r p\) or \(n\) on the verb and
4) the use of the vowel \(u e\) or \(u\) (feminine backing), \(i\) (plural fronting).

In addition to the free nominal, there are three instances of agreement on the verb: the clitic, the consonant, and the vowel, as shown in (38).
(38) \(P e \quad y u-p e-p \grave{e}=p e\)

3SG.F brother-3SG.F.DAT-3SG.F.POSS=3SG.F.DAT
\begin{tabular}{ll}
\(t a-k e ́=k e\) & \(p e=r u ́ e\). \\
hair-3SG.NF.POSS=3SG.NF.DAT, & 3SG.F=3SG.F:shave:3SG.F \\
'She shaved her brother's hair.' &
\end{tabular}

As stated in 3.1, with first and second persons the free pronominal is optional, though the pronominal clitic must still be present, even when the inflected verb stem uniquely identifies the subject. This is also true of control environments.
\begin{tabular}{|c|c|c|c|c|c|}
\hline (Mè) & nì & \(m e ̀=\) póeng \(=k o\) & (nì) & \(p a\) & \(n \grave{=}=\) \\
\hline 2SG & 1SG & & 1SG & & \(1 \mathrm{SG}=\) fetch \\
\hline 'You & & to fetch some water. & & water & \\
\hline
\end{tabular}

The data shown above suggest that the verbs that display both consonant alternations and vowel alternations to indicate the person, number and gender of the subject do not have a pronominal feature included in the feature bundle that is part of the package indicated by the agreement paradigm, and that for third persons even the combination of consonant alternation, vowel alternation and proclitic is insufficient to allow a pronominal interpretation. The kind of 'doubling' here is quite different to that reported in Everett (1987, 1989), in which the verbal clitic 'doubles' an independent free nominal. In Skou we have just seen in this and the previous section instances of the verbal clitic doubling the verbal prefix, irregularly. We shall examine just one more case of multiple exponence in the verbal system, and then discuss some possible explanations for these patterns.

\subsection*{3.5 CONSONANT, VOWEL AND OTHER CHANGES: SUBJECT}

In addition to the marking of the subject by consonant alternation, vowel alternation, and proclitic, some verbs go further, and display obligatory alternations of the adjunct nominal which specifies the verb. The verb re 'go' shows consonant and vowel alternations for subject.
\begin{tabular}{llll} 
(40) & 'go' & SG & PL \\
& 1 & \(r e\) & \(n e\) \\
2 & \(m e\) & \(r i\) \\
& 3.NF & \(t i\) & \(t i\) \\
& 3.F & \(t e\) &
\end{tabular}

This verb can also be used with an adjunct nominal to designate a falling motion, rather than a deliberate translocatory movement. We have already seen one example of an adjunct nominal that shows alternations depending on the features present in the subject in the discussion of lú weng eye sleep 'be sleepy' in 3.2, indicating that the adjunct nominal is in some way incorporated into that part of the verb structure that is eligible for agreement. Just as with lú weng, the adjunct nominal kú that accompanies re shows alternations in its form depending on the values of the subject. However, kú occurs with a verb that already has person-number-gender distinctions present in the verb root, indicated by both consonant and vowel alternations.
(41) \begin{tabular}{llll} 
'fall' & SG & PL \\
& 1 & kúre & ine \\
2 & kú \(m e\) & iri \\
& 3.NF & kúti & \(i t i\) \\
& 3.F & píte &
\end{tabular}

Here we can see that all the alternations for the verb re 'go' are still found when it is used with an adjunct nominal, but that the adjunct nominal also displays suppletive forms for plural or feminine subject. This results in sentences such as the following:
\begin{tabular}{lll} 
Te \(\quad t e=i\) & \(t-i\). \\
3PL \(\quad\) 3PL=fall.PL & 3PL-go.3PL
\end{tabular}
'They fell over.'
In this sentence we have a total of four places in which the subject is obligatorily marked in the verb phrase, in addition to appearing as a free pronoun.

It could be argued that what we are witnessing here is in fact some verbs marking plurality of the subject by the use of a completely different verb stem. The fact that the tone and nasalisation values of the syllable never differ across a verbal paradigm supports the analysis first presented, that the paradigm in (41) is actually a combination of consonant modification and vowel modification, or maximally stem adjustment (see below), rather than complete suppletion.

We could account for aspects of the Skou data by assuming a set of readjustment rules operating on the roots in Skou. The notion of readjustment rules is discussed in Halle and Marantz (1993: 124-129), following Halle (1990) and Lieber (1980), and is the process of adjusting the phonological shape of roots in certain grammatical environments. For instance, in English the addition of the regular [ t ] allomorph of the past tense morpheme \(-d\) should result in [kiptt]; in fact, [kept] is the form heard, after the application of a readjustment rule. Although the root form \([\mathrm{kep}]\) is found only in those environments that are marked with \(-d\), both the root changes as well as the overt suffix being added. Under Distributed Morphology (DM) this is not a case of multiple exponence, but of phonological readjustment (Halle and Marantz do note that the relationship between go and went is one of suppletion, not of readjustment, though it is not clear where the dividing line between the two should be drawn, and whether it can be decided on a non-arbitrary basis).

Applying this approach to Skou, we would consider the clitics to be the agreement markers, since they are found on all verbs (see 3.1). The consonant alternations found in the majority of Skou verbs is then a matter of readjustment rules applying: the verb \(o\) 'motion
seawards' is readjusted to mo when the subject is 2 SG , to ko when the subject is 3 SG.NF, to po when the subject is 3 SG.F, to no when the subject is 1 PL , and to to when the subject is 3 PL . The full paradigm of these alternations, with free pronouns, clitics and prefixes displayed, is shown in (43) with the verb \(o\) 'go seawards':


This DM approach will account for the data, as it will for any paradigm of alternations. It does, however, miss the fact that, while there is a degree of unpredictability in the inflectional system of Skou (as noted earlier in 3.3), the underlying nature of the system as it affects the roots involves regular prefixes, whose phonological form is (with the exception of the \(1 \mathrm{SG}-\) see table 4 and footnote 27) transparently related to the consonants of the free pronouns. The stem of the verb itself is invariant, as seen in (43). \({ }^{14}\)

To miss this generalisation would be to ignore a wealth of data on the genesis of agreement systems in languages (eg., Campbell 1990, Comrie 1980, Givón 1971, 1976). Further it would involve positing an amazing amount of coincidence in the phonological readjustments that take place, since such a wealth of agreement affixation-like material would be unlikely to arise randomly (see Stump (1993: 188) for similar arguments against this analysis in Chichewa).

\subsection*{3.6 VERB CLASSES OR CONJUGATIONS?}

We must consider the possibility that this variation in the exponence of subject agreement is due to the presence of different (semantically motivated?) verbal conjugations, or verb classes. To this end, I shall present the currently known lexicon of Skou verb roots, arranged by inflectional category, and examine them by transitivity criteria and by phonological criteria.

\footnotetext{
14 A better candidate for an analysis involving stem readjustment would be the vowel changes that are described in section 3.2. These are a more appropriate candidate for description by this means because they are found on some, but not all, verbs. They do still show an obvious grammaticalisation path pronoun >clitic > affix > vowel modification, but at an older level than proto-Skou. Productive object markers can be found in more distant relatives: Barupu has the 3SG.F.O suffix \(-u\), Womo has an identical suffix, and I'saka, even more distantly related, shows 3SG.F.DAT \(\boldsymbol{\imath}\), and 3SG.F.O -wi (Donohue and San Roque 2002). These morphemes appear to be related to the Skou rounding and backing process that marks feminine subject. Despite this connection, in the Skou languages (as described in figure 1) there are no regular suffixes, and the scope of the marking by vowel change covers subject.
}

Of the 69 verb roots that have been isolated in Skou, \({ }^{15}\) we find the following distribution into classes according to morphological agreement patterns:

Table 1. Skou verbs and agreement classes
\begin{tabular}{|c|c|c|c|c|}
\hline Morphosyntactic Class & Number of verbs & Semantic type & Phonological type & Members \\
\hline Clitic alone & 20 & low affect? & \[
\begin{aligned}
& \text { fhijlmn } \\
& \text { oepwy }
\end{aligned}
\] & \begin{tabular}{l}
fí 'meet'; hí 'wash'; ífángfong 'spit'; \\
\(j i ́\) 'break'; jí 'close'; loeloe 'sing'; \\
lú 'cough'; moeng 'stay'; ná 'splash'; \\
òeng 'let go'; pa pi 'swim'; \\
péngpèng 'sneeze'; póe 'endure'; \\
pong 'blow (fire)'; ta kue 'smash'; \\
wung 'die'; ya tà 'transact'; yang 'vomit'; \\
уи́yи́ 'search.for'
\end{tabular} \\
\hline Clitic + vowel & 2 & low affect? & \(f w\) & fu 'fear'; fue 'see'; weng 'sleep' \\
\hline \begin{tabular}{l}
Clitic + \\
C prefix
\end{tabular} & 27 & high affect? & ahklo & á (re) 'carry'; ang 'eat'; ha tà 'run'; há 'laugh'; há 'pound'; há 'stand'; hú 'paddle'; hung 'drink'; ká 'hit'; ké le 'give'; ké li 'catch'; keng 'ask'; kúng 'copulate'; lá 'cook'; láng 'hit.F'; làng 'chop'; le 'chop down'; li 'burn'; li 'do'; lí 'dance'; lí 'make'; lì 'be angry at'; lòe 'come'; lú 'release'; lue 'hear'; lue 'chop branch'; o 'go seawards'; \\
\hline Clitic + C prefix (+ invariant adjunct) & 13 & \begin{tabular}{l}
trans- \\
itive
\end{tabular} & aehloerw & à hù 'sew'; há te 'cover'; há yú 'chase'; he lí 'hang (tr)'; hí púe 'rotate'; lo hí 'hit with hand'; lóe le 'give to many'; na lu 'pound sago'; na lung 'teach'; ong e 'refuse'; ta hùng 'sit'; wé le 'give.F'; wì leng 'hide (tr)' \\
\hline \begin{tabular}{l}
Clitic + \\
C prefix + \\
vowel
\end{tabular} & 3 & & \(l r\) & lóe 'shave'; lóeng 'tell'; re 'go' \\
\hline Clitic + C prefix + adjunct changes & 2 & & h-h & eli 'be at'; há hi 'count' \\
\hline
\end{tabular}

\footnotetext{
15 In common with many Papuan languages (Foley 1986: 113-119), there are few lexical verb roots in Skou, with serialisation and adjunct nominal constructions allowing for more specialised predicative semantics. Other word classes, such as nouns and adjectives, do not show any inflection at all when used predicatively - for exceptions, see 4.2.3.
}
```

Clitic + 1 k-r i ri 'fall'
C prefix +
vowel +
adjunct
changes

```

In terms of the semantics of the verbs concerned, there do not appear to be any correlations with transitivity or intransitivity: all the morphosyntactically-defined verb classes listed in table 1 show approximately two-thirds transitive verb membership, which fits in with the language-wide pattern. This is summarised in table 2.

Table 2. Skou phonology and agreement classes
\begin{tabular}{lrrr}
\hline Morphosyntactic class & \begin{tabular}{l} 
Number \\
of verbs
\end{tabular} & intransitive & transitive \\
\hline Clitic alone & 20 & 8 & 12 \\
Clitic + vowel & 2 & 1 & 1 \\
Clitic + C prefix & 27 & 8 & 19 \\
\begin{tabular}{l} 
Clitic + C prefix (+ \\
invariant adjunct)
\end{tabular} & 13 & 2 & 11 \\
\begin{tabular}{l} 
Clitic + C prefix + vowel
\end{tabular} & 3 & 1 & 2 \\
\begin{tabular}{l} 
Clitic + C prefix + adjunct \\
changes
\end{tabular} & 2 & 1 & 1 \\
\begin{tabular}{l} 
Clitic + C prefix + vowel + \\
adjunct changes
\end{tabular} & 1 & 1 & - \\
\hline Totals & 68 & 22 & 46 \\
\hline
\end{tabular}

There do not appear to be any obvious phonological criteria that determine membership into one agreement class or another. The occurrence of different consonants or vowels with different classes is shown in table 3.

Table 3. Skou phonology and agreement classes
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline & cl & V & C & C+adj & C V & C adj & C V adj \\
\hline p & \(\checkmark\) & & & & & & \\
\hline t & & & & & & & \\
\hline k & & & \(\checkmark\) & & & & \(\checkmark\) \\
\hline b & & & & & & & \\
\hline j & \(\checkmark\) & & & & & & \\
\hline f & \(\checkmark\) & \(\checkmark\) & & & & & \\
\hline h & \(\checkmark\) & & \(\checkmark\) & \(\checkmark\) & & \(\checkmark-\vee\) & \\
\hline w & \(\checkmark\) & \(\checkmark\) & & \(\checkmark\) & & & \\
\hline y & \(\checkmark\) & & & & & & \\
\hline 1 & \(\checkmark\) & & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & & \\
\hline r & & & & & \(\checkmark\) & & \(\checkmark\) \\
\hline m & \(\checkmark\) & & & & & & \\
\hline n & \(\checkmark\) & & & & & & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline i & \(\checkmark\) & & \(\checkmark\) & \(\checkmark\) & & \(\checkmark\) & \\
\hline e & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) \\
\hline a & \(\checkmark\) & & \(\checkmark\) & \(\checkmark\) & & \(\checkmark\) & \\
\hline 0 & \(\checkmark\) & & \(\checkmark\) & & & & \\
\hline u & \(\checkmark\) & & \(\checkmark\) & \(\checkmark\) & & & \(\checkmark\) \\
\hline ue & & \(\checkmark\) & \(\checkmark\) & & & & \\
\hline oe & \(\checkmark\) & & \(\checkmark\) & \(\sqrt{ }\) & \(\checkmark\) & & \\
\hline +N & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & \(\sqrt{ }\) & \(\checkmark\) & & \\
\hline -N & \(\checkmark\) & \(\sqrt{ }\) & \(\sqrt{ }\) & \(\sqrt{ }\) & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) \\
\hline H & \(\checkmark\) & & \(\checkmark\) & \(\checkmark\) & \(\sqrt{ }\) & H-L & H-L \\
\hline L & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & L-L & \\
\hline F & \(\checkmark\) & & \(\sqrt{ }\) & \(\sqrt{ }\) & & & \\
\hline
\end{tabular}

The suprasegmental features, \(\mathrm{H}(\mathrm{igh}) \mathrm{L}(\mathrm{ow})\) and \(\mathrm{F}(\) all \()\) tone, do not show any correlations with verb class; the absence of some possible combinations (H or F in the vowel-modification class, for instance) can be attributed to the small number of members in some classes, and the relative frequency of the tonemes: Low accounts for approximately \(50 \%\) of syllables, High for \(35 \%\), and Fall for the remaining \(15 \%\). Nasalisation accounts for only \(25 \%\) of syllables, and so its absence in the one-member classes is not surprising.

The occurrence of vowels in verb roots similarly reflects the markedness patterns in Skou, and does not reflect any skewing to one class or another. The distribution of consonants and verb classes does show a pattern, as previously mentioned in 3.3: verbs with consonantal prefix inflection can only appear with \(k h l\) as the onset in their root; any other onsets are only found with non-prefixing verbs. The fact that \(h\) and \(l\) occur with both prefixing and nonprefixing verbs, however, shows that the overt appearance of prefixal agreement is not simply a function of the initial consonant in a root allowing the agreement to be realised or not. We return to this point in section 4.3, where a historical account is proposed that suggests that, despite the synchronic irregularities, it is likely that the nature of the consonant is relevant.

\section*{4. Earlier models}

This section presents brief analyses of the Skou data in the frameworks of earlier work on morphology, specifically examining the problems it brings for an account with Andrews' Morphological Blocking Principle, issues it raises, not fatally, for the Minimalist Program, and problems with a Deconstructive Morphology or Distributed Morphology model when applied to Skou.

The essential problem, as we have seen in the preceding section, is that the Skou data show that a language can have more agreement on the same element of the clause than is required simply to register the identity of an argument. We have seen that verbs commonly employ double agreement for subject, with an alternation in the form of the verbroot, either consonantal or vocalic changes, as well as an obligatory proclitic pronoun. In more extreme cases, such as i ri 'fall', we see up to four instances of agreement with the subject on the verb complex, as proclitic, consonant, vowel, and adjunct nominal all show variation with features of the subject. In this section we shall examine some ways that modern morphological frameworks approach multiple exponence, and discuss why these solutions are not appropriate for Skou.

\subsection*{4.1 DOUBLE AGREEMENT: LEXICALIST AND INCREMENTAL THEORIES}

In Skou a verb with double agreement has two marked morphemes on the verb that exist solely to mark agreement. In a sentence such as (11) (repeated from 3.1), both the proclitic ne and the consonant \(n\) - on the verbroot ang serve no purpose other than, in both cases, to unambiguously index a 1 PL subject. \({ }^{16}\)
(11) Ne ya ne=n-ang loeng \(p a, \ldots\) 1 PL thing \(1 \mathrm{PL}=1 \mathrm{PL}-\) eat finish PROX 'When we have finished eating, ....'

It is immediately apparent that sentences such as (11) do not obey principles of economy, or blocking, and are also difficult to explain in an incremental model of morphology, since both \(n e=\) and \(n\) - unambiguously and solely code 1PL.

\subsection*{4.1.1 Morphological Blocking}

The problem that we face with blocking is that in addition to the most highly specified element that correctly parses the features required (the subject clitics), we often find repetition of exactly the same information in other morphemes. To illustrate, consider sentence (11), repeated in the preceding section. The verbroot is ang 'eat'; when the first person plural prefix \(n\) - is prefixed to it, all the person and number information that may be specified given the set of agreement morphemes available in Skou has been communicated. Nonetheless, Skou requires an additional agreement marker \(n e=\) on the verb complex. This is clearly in violation of Andrews' formulation presented in section 1.

\subsection*{4.1.2 Principles and Parameters}

Following a Principles and Parameters model (Chomsky 1995, Lasnik 1999) we require separate nodes in which to check for agreement morphemes; the following tree (from Chomsky and Lasnik (1995: 60)) illustrates the type of structures proposed (IP = AgrP).


Since a verb cannot check the same node twice, the Skou data would force us to either conclude that the supposed two agreement positions are really one, or to have two AgrsPs, with the verb checking for \(\mathrm{Agr}_{S}\) at each of them, acquiring morphological material along the way. The first of these arguments requires the following reanalysis of the agreement

\footnotetext{
16 In addition the subject is unambiguously indicated by the free pronoun \(n e\), but, as demonstrated in 3.1, the verbal affixes are not incorporated pronouns, and so this is not relevant to the point here.
}
morphemes first seen in (11), with the clitic \(n e=\) and prefix \(n\) - being reanalysed as a unit prefix nen-:
\[
\begin{array}{lllll}
\text { Ne } & \text { ya } & \text { nen-ang } & \text { loeng } & \text { pa, } \ldots  \tag{45}\\
\text { 1PL thing } & \text { 1PL-eat } & \text { finish } & \text { PROX } \\
\text { 'When we have finished eating, } & \text {....' }
\end{array}
\]

Although indefensible from a historical perspective, this would be a simple solution to the apparent multiple agreement morphemes for a single argument such as has been described for Skou. This analysis is not, however, tenable, because of the positioning of the agreement morphemes when some (but not all) adjunct nominals are involved (see 3.2). To illustrate, consider the placement of the subject agreement morphemes \(k e=\) and \(k\) - in (46), in which the inflecting verb hùng 'sit' appears with the the adjunct nominal ta 'seating':
\[
\begin{array}{llll}
\text { Tittí-nì=ne } & k e=t a & k \text {-ùng } & \text { tang. }  \tag{46}\\
\text { fathers.elder.brother-1SG.POSS=1SG.DAT } & \text { 3SG.NF=seating 3SG.NF-sit } & \text { canoe } \\
\text { 'My uncle sat down in the canoe.' } & &
\end{array}
\]

The \(k\) - on the inflecting verb root hùng 'sit' is a subject agreement prefix. In a minimalist framework this agreement marker will be generated by verb movement to Spec of Agrs. The problem in accounting for this sentence is that we need to incorporate the adjunct nominal \(t a\) AFTER the agreement has been satisfied, and following this (regardless of the problems of dealing with \(t a\) ) we would need to somehow check again in Spec of Agrs. It is not obvious how this can be readily accomplished in keeping with the spirit of MP.

Alternatively, we can have two \(\mathrm{Agr}_{s}\) Phrases matching the two different pieces of agreement morphology; this structure would appear as in (47):


Whilst possible, this analysis is not extendable to the whole of the language, since not all verbs take two agreement positions (a point that we return to in 4.4). It seems that allowing this level of extra structure to apply to the language as a whole is unsatisfactory.

\subsection*{4.1.3 Lieber}

In Lieber's (1992) model, in which lexical affixes combine with roots and the features of the affixes percolate over the word as a whole, the mechanism of percolation is defined so that the features present in an inflected word can each be traced to a unique affix (or be present in
the root itself); there is no mechanism to allow for multiple exponence (1992: 77). \({ }^{17}\) Lieber (1995: 280) simply notes that 'multiple additions of identical information are precluded.'

Clearly, incremental models of morphology, in which morphemes are seen as adding features to less specified roots (in addition to those discussed, see also Mohanan 1986), are inadequate for a description of redundant inflection, such as the multiple exponence seen in Skou agreement.

\subsection*{4.1.4 Distributed morphology}

Lexical models of inflection (such as the Distributed Morphology framework of Halle and Marantz 1993) similarly deny the challenge posed by multiple exponence (see the quote from Noyer (1997) in section 1). For instance, discussing Potawatomi verb inflection Halle and Marantz deny that there is any extended exponence of agreement features in the verb (as argued for by Anderson (1992)), assigning \({ }^{18}\) the first agreement marker to phrase-level clitic status and so outside the scope of an analysis of purely verbal morphology. The remaining agreement markers, as they note, mark different sets of features, and so can be taken as each contributing new information, and are separated from each other by other inflection: negation, tense (Halle and Marantz 1993: 140).

Skou is analytically different: the sets of features marked by, say, the proclitics and the consonantal prefixes are identical (see 3.5, especially the discussion of \(o\) 'go seawards'). Further, the Skou clitics serve to (obligatorily) double an independent pronoun or nominal elsewhere in the clause, so there is no motivation for their analysis as anything other than verbal agreement markers. Finally, tense marking in Skou does not intrude between the subject agreement prefixes; past tense is marked with a low tone on the verb, and future with a suffixal reduplication, as seen in the following examples: \({ }^{19}\)
(48) Mè te \(m e ̀=b-e ́ \quad k a\).

2SG 3PL 2SG=2SG-catch NEG
'You don't catch them.'
\begin{tabular}{llll} 
Mè & te & \(m e ̀=b-e\) & \(k a\). \\
2SG & 3 PL & \(2 \mathrm{SG}=2 \mathrm{SG}-\mathrm{catch}\langle\mathrm{PAST}>\) & NEG \\
'You didn't catch them.'
\end{tabular}

17 Lieber does not discuss multiple exponence explicitly within the incremental framework that she develops. The discussion of multiply marked features (1992: 93-101) deals with the marking of both subject and object on the verb in Yavapai. Interestingly, the question of multiple exponence is avoided when presenting an explication of feature percolation in the verb \(s \tilde{n}-m-t a: v-k m\) 'You hit me'. The prefix \(s \tilde{n}\) - is listed on p. 95 as 'first person object with second person subject', and \(m\) - as 'second person subject or object'. Since \(\tilde{n}\) - also functions as a more general first person (subject or object) morpheme, we are led to assume that \(\dot{n} \tilde{n}\) - bears information about both the subject and object, making the use of \(m\) - redundant under an analysis using principles of blocking or economy. In the derivations Lieber shows on p. 98-101 \(\dot{n}\) - is listed as bearing only the first person features.
18 Correctly, it seems, on the basis of the data that shows the morphemes appearing on phonologically independent words in the CP. See Anderson (1999) for counter-arguments.
19 We can show that this morpheme is suffixal, or at least applies to the end of the verb and not the beginning, by examining disyllabic verb roots. With hatà 'run', for instance, the reduplicated form is hatátà, and not * hahatà. See also Ross (1980: 97) for discussion of identical facts in Dumo.
\(\begin{array}{lllll}\text { (50) } & \text { Mè } & \text { te } & m e ̀=b-e ́-b e ́ ~ & k a . \\ & \text { 2SG } & \text { 3PL } & \text { 2SG=2SG-catch-RED } & \text { NEG }\end{array}\)
'You won't catch them.'
A feature-unification account would allow for the presence of two agreement morphemes with the same features, provided the principles of economy are dispensed with, but would not account for the fact that not all verbs take the same amount of inflection; this is discussed in section 4.4.

\subsection*{4.1.5 Summary}

We have seen that both incremental models of morphology, as well as popular lexical models, are not efficient in accounting for Skou. It seems preferable to advocate a realisational model that relies not on the lexicon, but on inferential principles; as Stump (2001: 1) puts it, a model "in which the systematic formal relations between a lexeme's root and the fully inflected word forms constituting its paradigm are expressed by rules or formulas". In this sort of model (versions of which are advocated by Anderson 1992, Beard 1995, Matthews 1972, Stump 1997, 2001, amongst others) the morphemes present are those required in order to realise the features specified by the functional arguments present, and as mapped onto a (phonological/morphological) template that is essentially construction-specific. While admitting that this sort of model is inherently not falsifiable, it is true that the incremental models are neither economical nor intuitive in terms of the regularity of change seen in Skou that would have to be assigned to the list of irregularities in the language. Section 4.4.4 returns to the question of accommodating Skou inflectional redundancy in incremental models.

This model is clearly incompatible with simple (diachronic or synchronic) functional explanations, since it requires elements that do not bear any functional load in the morphosyntactic structure of the sentence. Neither is it compatible with a model that requires all structure to be parsed uniformly. I will outline the problems for this latter model in section 4.4.

\subsection*{4.2 NEAR EQUIVALENTS? OTHER ACCOUNTS OF MULTIPLE EXPONENCE}

There are reports of constructions in languages that resemble in some way, or are described in a way such that they resemble, the multiple exponence found on verbs in Skou. We have already examined the Potawatomi case in 4.1.4, and shall discuss two more instances of alleged multiple exponence in the following sections. Section 4.2 .3 shall be concerned with a slightly different issue, that of reports of repetition of the same affix, which would be the most extreme example of multiple exponence possible.

\subsection*{4.2.1 Luiseño}

Steele (1989) discusses what she calls multiple agreement in Luiseño (Uto-Aztecan, Southern California), in which up to four different agreement positions were identified within the clause (similar argumentation is found in Steele 1995).

Steele argues that the appearance of \(\phi\)-feature specific morphology in 'multiple' agreement locations in the clause, such as on an NP, an auxiliary, and the verb, represents multiple exponence. Luiseño differs from Skou in that each position displaying \(\phi\)-feature values is also the sole exponent of another, separate, grammatical category: the auxiliaries, for instance, carry tense-aspect-mood information for the clause. Reflexive pronouns, one of the
positions that Steele describes in which subject values appear, self-evidently supply reflexive information. Such an analysis of multiple locations marking subject can also be applied to Skou (and many other languages), if we allow auxiliaries, serial verbs and reflexives to enter the picture. A relatively uncomplicated pair of examples in Skou, structurally analogous to the sentences that Steele presents, are the following:
(51) Pe ta-pè=pe pe=ló tue e tue.

3SG.F hair-3SG.F.POSS=3SG.F.DAT 3SG.F=wash 3SG.F.do 3SG.F.be 3SG.F.be 'She is washing her hair.'
\begin{tabular}{lllll} 
Ke & \(k e=k\)-atà & \(k-o\) & \(t i\) & báng. \\
3SG.NF & 3SG.NF=3SG.NF-run & 3SG.NF-go.seawards & 3SG.NF.go & beach \\
'He's running to the beach.' & & &
\end{tabular}

The use of a possessed body part is the equivalent of a reflexive in Skou; in (51), we see the clitic \(p e=\) attached to a verb which, by regular consonant prefixing and vowel alternations, marks 3SG.F, and an auxiliary that doubly marks 3SG.F. In (52) the requirement that each verb inflect for subject by prefix is simply an uninteresting artefact of the serial verb construction. Adding new elements to the sentence like this increases the number of places for agreement, and does not address the truly interesting fact about Skou agreement, which is the lexicallydetermined obligatory use of multiple primary exponence for \(\phi\)-features.

\subsection*{4.2.2 Dargwa}

Anderson (1992) discusses the appearance in Dargwa (North-east Caucasian, Dagestan) of multiple marking for class/gender on the same lexical item. Anderson (1992: 88-89), quoting Magometov (1976), presents the following paradigm (which typifies the pattern in languages of this family):

Dargwa
a. \(b-\mathrm{j} k\) ' \(a-z i-b\)
qali:'e
NONHUM.SG-little-SG-NONHUM.SG bird.SG
'little bird'
b. \(d-\dot{j} k ' a-\dot{\epsilon} u-d \quad q u k i \dot{\prime} \cdot-n e\)

NONHUM.PL-little-PL-NONHUM.PL bird.PL 'little birds'
c. \(w\) - \({ }^{\prime} k ' a-z i-w ~ g a l\)

MALE.SG-little-SG-MALE.SG child
'little child'
d. \(b\) - \(\dot{j} k^{\prime} a-\dot{\tilde{z}} u-b\) gal-e

MALE.PL-little-PL-MALE.PL children 'little children’

Anderson (1992: 88), arguing for an inferential, realisational model of morphology, suggests that an analysis of word form alone would require us to posit three separate markers on the adjectives. I suggest that the Dargwa data is better handled by simply positing agreement in two positions with two morphemes, a gender marker and a number marker. The number suffix applies to mark number; gender marking uses morphemes which are suppletive for singular and plural variants; they thus also parse number information, but not exclusively so, since they also present new information. The appearance of both prefix and suffix is a
result of two different syntactic functions being marked on the same verb, a morphosyntactic feature that Anderson (1992: 97-98) notes is found in Dargwa transitive verbs. Applying this datum to the Dargwa phrases here, following the analysis proposed by Ortmann (1999: 112114), I analyse the prefix as showing agreement with the absolutive argument of the participle, as do all verbal forms and their derivatives, and the suffix as showing agreement with the head noun. \({ }^{20}\) In the case of the Dargwa examples quoted in (53), all monovalent predicates, the absolutive argument of the predicate and the head noun happen to be the same argument, and so apparently multiple marking is found. In a participle of the form 'the man who found the gold', the two affixes would be distinct, one agreeing with 'man', one with 'gold' (Ortmann 1999: 113). We could re-gloss (53a) to reflect this difference as in (53a)' below.

\section*{Dargwa}
```

a'. b-jk'a-zi-b qaki'e
NONHUM.SG.ABS-little-SG-NONHUM.SG.HEAD bird.SG
'little bird'

```

It thus becomes apparent that we are dealing with two different affixes, which happen to have the same form in these examples (see 4.2.3 for similar argumentation regarding Chichewa). We could alternatively analyse the gender markers as being circumfixal to the inflected root, shown below.


This example of apparent double marking can thus be seen to be simply splitting the agreement features between two morphemes, one of which is multifunctional (or suppletive, conditioned by number). This analysis is similar to that for Potawatomi, but with with the complication that we must necessarily assume the morphological validity of circumfixes.

Neither of these Dargwa analyses can be extended to Skou. Firstly, the agreement clitics and prefixes in Skou mark exactly the same feature bundle - there is no splitting of features, and no separate morphosyntactic environments. Secondly, the circumfixal analysis would be problematic in cases when adjunct nominals are involved in Skou : sometimes the clitic precedes the adjunct nominal + verb, sometimes it intrudes between the two, as seen in the following templates (for examples, see 3.2, 3.5 and 4.1.2):
\begin{tabular}{lrl}
\(l\) sit' & CLITIC \(=\) & [ADJUNCT.NOM \\
[ADJUNCT.NOM & CLITIC \(=\) PREFIX-Verb] \\
'shoot' & PREFIX-Verb]
\end{tabular}

It is not obvious how this would be reconciled morphologically, without further lexical stipulation.

The previous sections, 4.1 and 4.2, have shown how other analyses of multiple exponence are either not analogous to Skou, because of important differences in the data, or because of different aims on the part of other authors. Following an explanation for the modern Skou patterns based on a historical-functional model, I shall present a model that allows us to

\footnotetext{
20 Identical agreement facts are found in Burmeso, a linguistic isolate from north-central Papua (Donohue 2001).
}
capture the idiosyncrasies of Skou agreement, and demonstrate that similar models are motivated by data from nominal systems in some Bantu languages.

\subsection*{4.2.3 Chichewa}

Chichewa, in common with most other Bantu languages, has prefixation for noun class on most syntactic elements of the clause. As with many other Bantu languages, there is also a 'pre-prefix', which is found immediately preceding the class prefix; the class prefix is obligatory, and the pre-prefix is found in some environments, but not others, and so is optional (depending on morphosyntactic conditioning). Both the class prefix and the preprefix mark the noun class and the number of the noun. In these cases it has been used as an example of the multiple exponence of grammatical features (Stump 1993). Examples that Stump uses, showing how different 'adjectival roots' have different patterns of agreement, are of the following sort, in which -bwino shows simple agreement, and -kulu has double marking:

Chichewa (Stump 1993: 175-176)
ci-manga ca-bwino CL7-maize CL7:QUAL-good 'good maize’
```

ci-pewa ca-ci-kulu
CL7-hat CL7:QUAL-CL7:CONC-large
'a large hat'

```

The same 'double prefixing' pattern is found in other discourse functions, so that a double-marking property appears with this double pattern even when predicative:

Chichewa (Watkins 1937: 39) (orthography following Watkins)

```

CL7-evil.spirit CL7:his COP CL7:QUAL-CL7:CONC-dangerous
'His evil spirit is dangerous.'

```

Objections have been raised to these examples being offered as pure multiple exponence by Ortmann (1999), in a discussion of 'affix repetition'. Ortmann demonstrates that the 'double-marking' lexemes such as kulu in (56) are in fact not lexical adjectives, but rather inchoative verbs, and take the qualifying prefixes derivationally.

Ortmann's account of Chichewa adjectives cannot apply to the double-marked verbs in Skou, since the other main word class (nominals, which includes 'adjectives') does not inflect when used predicatively (or otherwise). For instance, note the lack of agreement in (58) compared to (59):
a. Péngue ing a ue. mango DEF over.ripe 'The mango is over-ripe.'
b. * Péngue ing a (ke=)kue, * Péngue ing a (pe=)pue
\begin{tabular}{lll} 
a. & \begin{tabular}{ll}
\(F u\) & \(n i ̀\) \\
rain 1SG & \(k e=k a ́\) \\
3SG.NF=hit \\
'I got caught in the rain.'
\end{tabular}
\end{tabular}
b. * Fu nì ká, * Fu nì á

When used inchoatively adjectives can take clitics, as seen in (60) - (61). In the first example the sago tree is masculine, and so marked with the clitic \(k e=\) on the numeral, in clear contrast to the subject of \(j i\). In the second example both predicates are marked with \(p e=\), but the use of the obviate on \(p e=w-e ́ m a k e s ~ i t ~ c l e a r ~ t h a t ~ t h e r e ~ i s ~ a ~ d i f f e r e n t ~ s u b j e c t ~ f o r ~ l a n g p i, ~\) which is the cooked sago, regularly feminine (a causative would employ the light verb lí 'make, do').
(60) Hòe ing ne=jí ke=hìngtung héfèng.
sago that 1PL=break 3SG.NF=two, good
'The sago, we split it into two neat halves.'
(61) Ní pe=w-é=ko hòe ing pe=langpi.
sago.stirrer 3SG.F=3SG.F-stir=OBV sago the 3SG.F=delicious 'She stirs it with a sago stirrer, and that sago, it becomes really delicious.'

This more verbal coding for an inchoative sense is expected from Ortmann's analysis. Other uses of double agreement in Bantu languages which more closely resemble the Skou agreement data are discussed in section 4.4.3.

\subsection*{4.3 HISTORICAL EXPLANATIONS FOR THE SKOU AGREEMENT DATA.}

Some explanation for the apparent arbitrariness of the verbal agreement pattern in Skou can be proposed from a historical perspective. Other closely related languages also display many of the morphosyntactic features described for Skou: the same word order constraints and the same (underlying) consonant alternations on verbs to show agreement (but no agreement clitics). In this section we shall examine the agreement paradigms from these other Skou family languages in an attempt to understand the historical origins of multiple exponence seen in Skou.

The internal grouping of the Skou languages is shown in figure 2 (Donohue 2002):

Figure 2. The Skou family


As mentioned above, the set of consonant prefixes (that fuse with an initial consonant of the verb, if present) which we find in Skou show cognates in both form and function in the other Skou family languages, shown in table \(4 .{ }^{21}\) These prefixes have their origin in the

\footnotetext{
21 Data from other languages related to Skou is cited in an orthography compatible with the Skou data for ease of comparison; the only non-IPA addition to the Skou orthography is the digraph ny
}
consonants of clitic pronouns that have since fused onto the verb, losing their pronominal status.

Table 4. Underlying agreement prefixes in Skou family languages
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & Skou & Wutung & Dumo & Dusur & Leitre & *Skou \\
\hline 1SG & \(\emptyset-, k-, n-\) & \(\emptyset\) - & Ø- & \$- & П-, \(\mathrm{J}^{\text {- }}\) & * \(\mathrm{yj}^{\text {- }}\) \\
\hline 2SG & \(m\) - & \(m\) - & \(m\) - & \(m\) - & \(m\) - & * m- \\
\hline 3SG.NF & \(k\) - & 3 & J- & \(h\) - & \(k\) - & * k- \\
\hline F & \(p\) - & \({ }^{\prime}\) & \(b\) - & \({ }^{6}\) & \(i^{w}\) - & * \({ }^{\text {w }}\) - \\
\hline 1PL & \(n-\) & \(n-\) & \(n-\) & \(n\) - & \(n\) - & * n - \\
\hline 2PL & \(\emptyset\) - & \(\emptyset\) - & \(\emptyset\) - & \(\emptyset\) - & \(\emptyset\) - & * \(\emptyset\) - \\
\hline 3PL & \(t-1 / y-\) & \(d-/{ }^{-}\) & \(d-/ y-\) & \(d-/ y\) - & \(d-/ y-\) & * d- / y \\
\hline
\end{tabular}

While the underlying sets of agreement prefixes are clearly cognate across the languages, the range of verbs that they can attach to, and the phonological changes that arise from the prefixes interacting with root-initial consonants, are not comparable. \({ }^{22}\) In the Eastern Skou languages verbs can only begin with a highly restricted range of consonants, yet, since initial clusters are allowed, the verbal paradigms in the West Coast languages are the most complete (Wutung, Skou's immediate eastern neighbour, presents some exceptions to this, possibly under influence from Skou). Representative paradigms from Dumo and Dusur are given in tables 5 and 6 (compare with the Skou data in (35), with only four major patterns on inflecting verbs: vocalic, alveolar, velar and glottal).

Table 5. Dumo verbal agreement paradigms
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline & vocalic 'be positioned' & \[
\begin{gathered}
\text { bilabial } \\
\text { 'sit' }
\end{gathered}
\] & \begin{tabular}{l}
alveolar \\
'do'
\end{tabular} & alveolar N 'push' & palatal 'hit' & \[
\underset{\text { 'put' }}{\text { glottal }}
\] & \[
\underset{\text { 'go' }}{\substack{\text { glottal }}}
\] \\
\hline 1SG & : 3 g & \(\theta\) & le & lung & yí & ذú & \(\pm{ }^{\text {j }}\) \\
\hline 2SG & wisg & Pr & ble & mlung & sí & bú & ma \\
\hline 3SG.NF & m: & 2 C & sle & slung & syí & ১ú & Sa \\
\hline F & wi & rer & pli & nung & sí & pú & cia \\
\hline 1PL & mixg & 38 & de & nung & ní & dú & na \\
\hline 2PL & \% 3 & \(\theta\) & le & lung & \(y i ́\) & ১ú & \(\pm a\) \\
\hline 3PL & mi & 38 & di & nyung & sí & tú & nya \\
\hline
\end{tabular}
for a palatal nasal. Nasalisation is not written consistently through a paradigm, because of the loss of contrast after nasal consonants in the eastern languages - see Donohue and San Roque 2000).
22 The fact that different languages simplify clusters in different ways suggests that the simplification of complex onsets was not part of the grammar of proto-Skou - Donohue (2002).

Table 6. Dusur verbal agreement paradigms
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline & vocalic 'go' & bilabial 'fly' & \begin{tabular}{l}
alveolar \\
'do'
\end{tabular} & alveolar N 'hit her' & palatal 'put' & \begin{tabular}{l}
velar \(_{1}\) \\
'hit him'
\end{tabular} & \begin{tabular}{l}
velar \\
'fetch
\end{tabular} \\
\hline 1SG & łá & cia & le: & láng & yí & gá & go \\
\hline 2SG & má & pa & ble & mláng & sí & bá & bo \\
\hline 3SG.NF & há & \(h \dot{4} \cdot\) & hle: & hláng & hyí & hyá & ho \\
\hline F & ciá & pa & \(h_{i} k i\) & náng & sí & pá & \(b\) 」 \\
\hline 1PL & ná & \(h \dot{4} \dot{a}\) & \(d \mathrm{c}\) & náng & sí & dá & do \\
\hline 2PL & á & cia & le: & láng & \(y i ́\) & gá & go \\
\hline 3 PL & yá & hi̇a & \(d i\) & nyáng & sí & tá & \(d s\) \\
\hline
\end{tabular}

Leitre does not allow clusters, but does have very explicit verbal paradigms. Again, Leiter ahd a wider range of syllable onsets than does Skou.

Table 7. Leitre verbal agreement paradigms
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & \begin{tabular}{l}
vocalic \\
'dig'
\end{tabular} & bilabial 'hit' & \begin{tabular}{l}
alveolar \\
'do'
\end{tabular} & alveolar N 'know' & \begin{tabular}{l}
palatal \\
‘swim'
\end{tabular} & \begin{tabular}{l}
velar \\
'boil'
\end{tabular} \\
\hline 1SG & nyì a & wi & le: & nù & \(y u\) & jù \\
\hline 2SG & nyì ma & \(p i\) & we & mù & su & mù \\
\hline 3SG.NF & nyì ka & \(k^{w} i\) & \(k \mathrm{e}\) & kùng & su & kùng \\
\hline F & nyì \(g^{w} a\) & \(p i\) & we & tùng & su & bùng \\
\hline 1PL & nyì na & wi & di & tùng & \(d u\) & nù \\
\hline 2PL & nyì a & wi & le: & nù & yu & \(\ddagger\) ¢ \\
\hline 3PL & nyì ya & wi & di & sùng & du & dùng \\
\hline
\end{tabular}

The differences that are found with Skou, compared to the Eastern languages, are fourfold:
- phonological mergers have collapsed a number of contrasts; \({ }^{23}\)
- there are less syllable onset types available for inflecting verb roots (only four in Skou, as opposed to six or seven in the east);
- phonotactic constraints rule out clusters in onsets;
- there is a large number of uninflecting verb roots;

Given the simple syllable patterns in Skou languages (see footnote 3), the reduction of consonant clusters means that a large number of verb forms in a paradigm lose their contrast. Comparing, for example, Skou with Dumo, we find the four Skou paradigms lose contrast in 11 (out of 28) cases, or \(39 \%\) of the time; this is found in paradigms such as ké, which is the form of the verb ké 'catch' in 1SG, 3SG.NF, 1PL and 2PL). In Dumo we see loss in 14 (out of

\footnotetext{
 Skou had eighteen consonant onsets, and between eight and eleven cluster onsets; Skou has thirteen consonant onsets and no clusters, showing a loss of half the contrasts in onset position.
}
49) cases, \(29 \%\) of the time. Dusur has the same proportion of collapse of contrasts, and Leitre and Wutung are slightly higher at \(33 \%\) (Leitre is higher because it, too, forbids complex onsets, and Wutung because it, influenced by its neighbour Skou, has reduced several consonant contrasts).

We can illustrate the effect of the ban on complex onsets on the verbal inflection in preSkou in terms of cluster simplifications. For full verbal forms, see 3.3.

(synchronically there are three allomorphs for \(1 \mathrm{SG}: ~ \emptyset\) - (the majority case), \(k\) and \(n\)-. The consonantal allomorphs reflect pre-proto-Skou \(*_{\text {In }}\), which has been lost in most languages (see Donohue 2002). In Skou \({ }^{\mathrm{T}}\) ) is lost ( \(>\) Ø) in nominals, \(>n\) in the 1 SG pronoun, and in verbal inflection is either lost (the majority case), preserved without nasality but retaining the velar place ( \({ }^{*}!\geqslant k\) ) (hung 'drink' and ang 'eat'), or else retains the nasal feature but loses the velar place ( \({ }^{(\mathrm{i}} \gg n\) ) (ong \(e\) 'refuse'). There may be (underlying, historical) variation in the 1SG prefix for the alveolar and velar paradigms as well, but this is not recoverable from the synchronic evidence. Regular sound changes would have *kl > 1 ; most other cluster reductions in the modern verbal paradigms are also compatible with regular historical changes))

In these examples we can see that in the process of cluster simplification a lot of contrasts are lost, in some cases most of the paradigm reflecting only the initial C of the verb root. This is probably the origin of a number of the non-inflecting verb forms. As noted earlier in section 3.1, verbs can begin with a larger range of consonants than \(k h w l a o\) or oe (described in (35)) - additionally, pj mf \(h\) y are found, but these verbs do not inflect by prefix. Historically it is likely that these forms showed inflection, just as in the Eastern languages. Extreme simplification in Skou has resulted in the complete loss of the inflectional system with these verbs; there is no longer any evidence in the paradigm for any inflection. \({ }^{24}\) Taking these verbs into account, assuming seven distinct paradigm sets as in the majority of the Eastern languages, we arrive at a figure of \(79 \%\) for loss of contrast in verbal paradigms.

These factors would appear to be sufficient to bring about a second process of cliticisation onto the verb in order to preserve contrastive verbal agreement. Taking into account the clitic+agreement:verbroot complex in Skou, the percentage of loss-of-contrast in the verbal paradigms drops to \(0 \%\), a functionally more satisfactory situation. For example, compare the

\footnotetext{
24 Similar to English verbs such as hit, which have no past tense marker, but in Skou there is no person inflection on the verb at all.
}
non-clitic bearing pre-modern Skou paradigm for 'speak', in which the V' shows only four contrasts, with the modern Skou equivalents, with seven contrasts.
\begin{tabular}{llc} 
& pre-Skou & Modern Skou \\
1SG & píli & pí \(n i ̀=l i\) \\
2SG & pípi & pí \(m e ̀=p i\) \\
3SG.NF & píli & pí \(k e=l i\) \\
3SG.F & pítoe & pí \(p e=t o e\) \\
1PL & píti & pí \(n e=t i\) \\
2PL & píli & pí \(e=l i\) \\
3PL & pí \(t i\) & pí \(t e=t i\)
\end{tabular}

> 'I/You/He/She/We/You(PL)/They spoke.' (pí is the adjunct nominal 'language')

Assuming that the modern underlying consonantal prefixes had their origins in cliticised forms of the free pronouns in proto-Skou, we can chart the development of agreement marking on the verb in table 8 . This table shows a first stage in which there is no agreement on the language. None of the Skou languages reflects this stage, but the striking similarity of the verbal prefixes with the free pronouns suggests that the development of verbal agreement lies in the not-too-distant past. Following this unmarked stage, we find cliticisation of the free pronouns onto the verb, the beginnings of the consonantal prefix system, which is realised in Stage III, a stage partially preserved in the West Coast languages, which show the sorts of clusters seen in tables 5 and 6 . The next stage is one in which cluster simplification takes place, and there is a greater degree of merger between the prefix and the verb root. This stage is still found in Leitre, but in Skou, with a smaller consonant inventory, the underdifferentiation (see (62), (63)) has resulted in a second wave of cliticisation, paralleling the development seen in Stage II earlier.

Table 8. The development of verbal agreement in Skou languages
\begin{tabular}{llll} 
& DP \(_{\text {SUBJ }}\) & \multicolumn{1}{c}{ VP } & language \\
Stage I & \(\mathrm{C}_{1} \mathrm{~V}\) & obJ \(\mathrm{C}_{2} \mathrm{~V}\) & (hypothesised) \\
Stage II & \(\mathrm{C}_{1} \mathrm{~V}\) & ObJ \(\mathrm{C}_{1} \mathrm{~V}=\mathrm{C}_{2} \mathrm{~V}\) & early proto-Skou family? \\
Stage III & \(\mathrm{C}_{1} \mathrm{~V}\) & ObJ \(\mathrm{C}_{1}-\mathrm{C}_{2} \mathrm{~V}\) & West Coast languages \\
Stage IV & \(\mathrm{C}_{1} \mathrm{~V}\) & ObJ \(\mathrm{C}_{1}+2 \mathrm{~V}\) & Leitre \\
Stage V & \(\mathrm{C}_{1} \mathrm{~V}\) & ObJ \(\mathrm{C}_{1} \mathrm{~V}=\mathrm{C}_{1}+2 \mathrm{~V}\) & Skou
\end{tabular}

Although the status of this double agreement marking in Skou is synchronically awkward for morphological modelling, it appears to have a historical explanation that is in line with what we know of the development of agreement systems cross-linguistically.

\subsection*{4.4 CONCLUSIONS AND MODELS}

The Skou data clearly present problems for modern formal linguistic frameworks, both those based on structural positions and incremental morphology and economy-conscious unification models. I have suggested that a templatic approach to agreement positions, while stipulative, is capable of accommodating the data. However, given that the number of agreement positions found in a language is essentially arbitrary, as is the ordering of those agreement
morphemes on the verb (Donohue 1999 and others), this approach may not be as undesirable as it at first seems. It does not lead to tighter claims about what is possible and impossible in language, but it allows for a greater set of data to be adequately accounted for, and to provide tools to simplify the description of other morphological problems.

\subsection*{4.4.1 Lexical templates}

An elaboration of this model would involve the addition of a morphological realisation component to the structure (deep structure in the minimalist framework, functional structure in LFG), independent of the number of arguments that display agreement - essentially a further, non-predictable element in the lexical entry of the verb. Furthermore, this is specified, essentially stipulatively, for different classes of verbs in the language: it is not a parameter with a global setting in the language, nor does it correlate with any phonological or semantic specification of the verb root itself, as discussed in section 3.6. This stipulativeness would prove problematic (though not impossible) for an analysis using A-morphous Morphology (Anderson 1992). Skou does not simply require a setting that allows the multiple exponence of features for some reason (that is, properties of person/number/gender are shared by two morphemes), but rather requires this for some verbs, and not for others. The data on adjunct nominals in section 3 are also problematic for this model, again because of the amount of stipulation. We find variation in the exponence of subject on verbs ranging from a single agreement morpheme, the proclitic, such as yú 'search for', to the kind of multiple marking seen in verbs such as lóe 'shave'. Consider the paradigms of the following four verbs, shown in full as they must appear in fully formed sentences (only the verbs, and not the necessary free (pro)nominals, are shown):
\begin{tabular}{|c|c|c|c|c|}
\hline & 'cough' & 'release' & 'sleep' & 'shave' \\
\hline 1SG & \(n \grave{l}=1 u ́\) & \(n \grave{=}=1 u ́\) & nì \(=\) lú weng & nì=lóe \\
\hline 2SG & \(m e ̀=l u ́\) & \(m \grave{e}=p u ́\) & \(m e ̀=l u ́ ~ w e n g ~\) & mè=póe \\
\hline 3SG.NF & \(k e=l u ́\) & \(k e=l u ́\) & ke=lú weng & \(k e=l o ́ e ~\) \\
\hline 3SG.F & \(p e=l u ́\) & \(p e=r u ́\) & pe= ló weng & \(p e=r u ́ e\) \\
\hline 1PL & ne=lú & \(n e=r u ́\) & ne=lú weng & ne=róe \\
\hline 2PL & \(e=l u ́\) & \(e=l u ́\) & \(e=l u ́\) weng & \(e=\) lóe \\
\hline 3PL & \(t e=l u ́\) & \(t e=r u ́\) & te=lé weng & \(t e=r i ́\) \\
\hline
\end{tabular}

Preliminary lexical entries for these four sample verbs would include templates similar to those seen in (65) - (68), in which information about the amount and type of verbal inflection, as well as the number and type of arguments that are subcategorised for by that verb, is fully specified (ignoring issues concerning the representation of adjunct nominals in argument structure - see Mohanan 1995, 1997). \({ }^{25}\)

\footnotetext{
25 The fact that all verbal predicates regularly inflect by means of the proclitic does mean, however, that not all inflectional material needs to be lexically specified. These templates are given as an example.
}
\begin{tabular}{|c|c|c|}
\hline （65） & lú＇cough＇ & \(\left[\begin{array}{lll}\text { PRED＇lú＇} & \text {＇SUBJ } \\ \text { SUBJ } & & \text {［proclitic }=] \\ \text { OBJ }\end{array}\right.\) \\
\hline （66） & lú＇release＇ & \(\left[\begin{array}{lcrl}\text { PRED } & \text {＇lá＇} & & \text { 〔SUBJ，OBJ〉 } \\ \text { SUBJ } & & \text { prefix－］} & \text {［proclitic＝}] \\ \text { OBJ } & & \end{array}\right]\) \\
\hline （67） & lú weng＇sleep＇ & \(\left[\begin{array}{lll}\text { PRED＇lú weng＇} & & \text { \SUBJ〉 } \\ \text { SUBJ } & & \\ \text { OBJ }\end{array}\right.\) \\
\hline （68） & lóe＇shave＇ & \(\left[\begin{array}{llll}\text { PRED } & \text {＇lóe }{ }^{\prime} & \text { 〈SUBJ，OBJ〉 } \\ \text { SUBJ } & \text {［prefix－］} \\ \text {［vowel change］} & \text {［proclitic＝］}\end{array}\right]\) \\
\hline
\end{tabular}

This is similar，but importantly not identical，to treatments of quirky case as lexically－ determined phenomena．Table 9 shows how these morpheme－specifying templates realise the observed inflectional morphemes on different verbs：

Table 9．Sample derivations involving the different verbal templates
\begin{tabular}{|c|c|c|c|c|}
\hline Verb： & lú & lú & lú weng & lóe \\
\hline & ＇cough＇ & ＇release＇ & ＇sleep＇ & ＇shave＇ \\
\hline Inflectional & ［proclitic］ & ［proclitic， & ［proclitic， & ［proclitic， \\
\hline & & & vowel change］ & C prefix－ vowel change］ \\
\hline Inflect：3PL SUBJ & & & & \\
\hline Input： & lú & lú & lú weng & lóe \\
\hline Vowel change： & － & － & lé weng & lí \\
\hline Prefix： & － & \(t\)－ & － & \(t\)－ \\
\hline Prefix adjustment： & － & rú & － & rí \\
\hline Proclitic： & \(t e=\) & \(t e=\) & \(t e=\) & \(t e=\) \\
\hline Output： & \(t e=l u ́\) & \(t e=r u ́\) & te＝lé weng & \(t e=r i ́\) \\
\hline
\end{tabular}

The application of the incorrect morphological template can easily result in a radically different（and incorrect！）output．If＇cough＇was incorrectly taken to be a verb that inflects by prefix，we would expect an output something like＊te＝rú，which is not attested．Similarly， should＇shave＇be misconstrued as inflecting in the same manner as＇release＇，we would expect＊te＝róe，and not the attested te＝rí．Numerous other mis－parsings are possible，if the wrong morphological template is chosen．Note that this is not a fault in the parsing of features：knowing that we need to inflect each of these verbs for the feature－bundle \([\) PERS \(=\) 3 ，NUM＝PL］，this can be economically and completely achieved with nothing more than the clitic \(t e=\) added to the verb stem：\(t e=l u ́, * t e=l u ́, * t e=l u ́ w e n g, * t e=l o ́ e\) ．This would be the most regular，least ambiguous，and most overt inflectional paradigm．It would be easily accounted for either incrementally or realisationally：the former position would simply allow
the clitic \(t e=\) to add the features \([\mathrm{PERS}=3, \mathrm{NUM}=\mathrm{PL}]\) to the verb; the latter would require the clitic in order to parse these features in the morphologically complete form.

Skou does not adhere to these simple and economical principles, and does not follow the course seen in other languages that have been advanced as examples of languages with multiple exponence of features. Skou does not:
- split the features of the inflectional system over different morphemes (with or without partial overlap);
- uniformly specify two (or more) places in the morphological template of all inflecting parts of speech that must both parse all features;
- mark the features of the inflectional system in a portmanteau fashion with other grammatical information specified on each morpheme (in this way allowing the morpheme that also parses inflectional information to be seen as simply the most compatible version of another paradigm)
- show different patterns of inflection in different syntactic environments

Skou provides us with evidence that, regardless of the model of morphology, it needs to be able to deal with the essential arbitrariness of a system that shows considerable variation in the realisation of inflection, without having semantic or phonological grounds for that variation. This calls for lexical specification.

\subsection*{4.4.2 The power in the lexicon}

I have shown how a simple templatic model can be used, as an 'add-on' to the lexical specification of each verb, that allows us to model the Skou data within a larger theory of morphology. While effective, this has the effect of assigning much information about the inflectional system to the lexicon, and not the grammar. While undesirable from a generative perspective, this is not necessarily a result that we should avoid. As has been mentioned in passing (section 3.1, examples (24) - (26), and footnote 9), possessive inflection on nouns is also not predictable. The lexical entries of a small group of nouns must announce their requirement to have triple-marked possession - just as with verbs, there is no obvious semantic or phonological parameter that singles out this group of nouns, and so the triplemarking nouns must each be lexically specified.

It seems that we are proposing a rather fundamental change in the way we conceptualise morphological interaction in a language, on the basis of data from just one language - on the surface, we would claim that the possibility for lexical stipulation is allowed in all languages, but simply never realised. \({ }^{26}\) There are, in fact, parallels in other languages, and we shall examine in detail the marking of noun class information in Bantu languages.

\subsection*{4.4.3 Multiple exponence and Bantu noun classes}

The 'pre-prefix', also known in the Bantu literature as the 'initial vowel', 'augment', or 'determiner', has been discussed with respect to Chichewa 'adjectives' in 4.2.3. Similar

\footnotetext{
26 That said, lexical templates do seem to be a simple way to account for some quirky case phenomena, and non-semantically based splits in intransitive marking.
}
constructions involving multiple prefixation are found in a range of Bantu languages, with a range of functions and restrictions.
(69) (determiner)-classifier-stem

In many languages the pre-prefix appears on nouns; in some it can be equated with definiteness, or something resembling negative polarity (eg., Luganda, Dewes 1971, Hyman and Katamba 1993, Kinande, Progovac 1993, Kinyamwezi, Maganga and Schadeberg 1992 amongst others). In other languages it appears only in restricted morphosyntactic contexts (not to imply that a feature such as 'definiteness' cannot have morphosyntactic effects as well as pragmatic ones).

In Lumasaaba (also Masaba: Central Bantu J, south-eatern Uganda: Brown 1972, Purvis 1907) the determiner (= preprefix) and classifier (= noun class marker) mark identical categories in all cases. There is no correlation with definiteness, but 'the determiner precedes the classifier when nouns occur in isolation, except in certain contexts' (Brown 1972: 18). Examples of minimally different syntactic environments that determine the use or absence of the determiner are shown in (70) and (71), with the verb jima 'stand' governing a locative that takes a genitive clitic, and the full DET-CL-noun morphology for the location. In (71), however, suna 'jump' takes a locative without the genitive clitic, and the location appears without the determiner: CL-noun.

Lumasaaba
\begin{tabular}{ll} 
[yimakwegamagumbe] & \\
jima ku-e & ga-ma-guNba \\
stand.IMP 17LOC-GEN & DET:6-CL:6-bone \\
'Stand by the bones.' &
\end{tabular}
[sunekumapuba]
suna \(\quad\) ku
jump.IMP 17 LOC
'Jump on the bones.' \(\quad\)\begin{tabular}{l} 
ma-guNba \\
CL:6-bone
\end{tabular}

Citation form for 'bones': [gamapmba], * [mapuba]
Here we can see that the appearance of the determiner is not dependent on definiteness of the nominal, but is predictable from the syntactic context, in this case based on the verb used. There is an important proviso to this account, however: 'in class 10 the determiner precedes the classifier. No syntactic environment can be constructed in which the class 10 classifier is not preceded by the determiner' (Brown 1972: 18). This can be demonstrated by comparing the behaviour of a class 10 noun in the same syntactic environments seen in (70) and (71). In both cases, both the determiner and the classifier appear. \({ }^{27}\)

\footnotetext{
27 These differences are not a function of, for instance, animacy: 'boy', class \(1 / 2\), shows the expected alternation between \(u\)-mu-siNde DET1-CLF1-boy and mu-siNde CLF1-boy.
}
```

Lumasaaba
[ymakwezimbepa]

| jima | ku-e | zi-N-ieia |
| :--- | :--- | :--- |
| stand.IMP | 17LOC-GEN | DET:10-CLF:10-bone |

'Stand by the rats.'
DET:10-CLF:10-bone
[sunakuzimbepa]
suna ku $\quad$ zi-N-iei
jump.IMP 17LOC DET:10-CLF:10-bone
'Jump on the rats.'

```
Citation form for 'rats': [zimbepa], *[mbepa]

We can summarise the Lumasaaba data as follows: there is a set of morphosyntacticallyconditioned environments in which nouns take both determiner and classifier; in some sense, the presence or absence of the determiner is specified morphosyntactically. There is, however, a set of essentially random lexical items which must always appear with both the determiner and classifier, with no morphosyntactic conditioning (Brown presents convincing arguments that these lexemes do not have just a single, complex prefix, such as the putative \(z i N\)-, for instance, in examples (72) and (73)). Brown (1972: 12) notes that 'Traditionally, gender in Bantu languages has been associated with semantic classification. The association is often not very distinct. In Lumasaaba, classes 1 and 2 contain only human and superhuman entries. No absolute restrictions govern entry to other classes...'. The evidence against this includes the paradigmatic appearance of just the determiner as agreement marker on verbs or demonstratives, and of just the classifier in other contexts.

The parallels with Skou verbs are remarkable: we have in Lumasaaba nominals another instance of the lexically determined appearance of agreement morphology. Jensen and StongJensen (1984: 482) note that 'in Classical Greek, a neuter plural noun requires a singular verb', showing yet another instance of a lexical category, essentially arbitrary, determining the exponence of inflectional features. \({ }^{28}\) Needless to say, Skou from northern New Guinea, Lumasaaba from eastern Africa, and Classical Greek, are completely unrelated languages. While a small set of examples, it is quite possible that such phenomena have at times been more widespread in the history of individual languages, and have been removed due to analogic levelling of paradigms. Van Klinken (1999) discusses a similar example of double marking of subject, by both clitic and prefix, in the Fehan dialect of Tetum (Austronesian, West Timor (Indonesia) and Timor Lorosae). In Tetum a free 1SG pronoun, not topicalised, may be doubled by both a clitic and a prefix on the verb, neither of which obligatorily conveys pronominal status (1999: 177-178). Differing from the Skou situation, Van Klinken provides evidence that the clitic + prefix combination which is optionally found for first person singular is in fact in the process of being reanalysed as a unitary prefix (1999: 177). This suggests that multiple exponence is losing ground in this language, possibly in the face of paradigm levelling (there is a clitic only for the 1SG, and verbal prefixes for more than just 1 SG only in \(h\)-initial verbs).

\footnotetext{
28 Particularly so if we accept that 3SG is the combination of the features [- I, - II, - PL], and so represents a default category.
}

\subsection*{4.4.4 Multiple exponence and lexical stipulation}

The templatic models in 4.4 .2 represent a direction that might be taken in any linguistic theory that seeks to model the type of lexical arbitrariness in morphology that we have seen for the Skou, Bantu and Greek data. The template represents a lexical means of indicating both the number and nature of the agreement positions, independent of the number of arguments that are displaying agreement. These templates might be used directly in a lexicalist framework, or could be 'plug-ins' to a structuralist model, such as the model according to Lasnik's framework presented at the end of 4.1.2. The 'multiple Agrs Phrase' analysis that was there dismissed will work to model the data in both Skou and Lumasaaba, as long as we can accept the requirement for lexical specification of structure, rather than a single general principle applying across all forms in the language. Since this is required in a lexicalist model anyway, it offers no argument against that theory, but does suggest that models of inflection need to refer not only to the generative power of grammar, but also to the power of the lexicon to specify how a lexical item behaves in the grammar.

Simply adopting an existing lexicalist model of morphology is not sufficient for understanding the kind of multiple exponence that we have seen in Skou and Lumasaaba, because these models, too, describe regular processes. Lexicalist models are quite explicit about the need to avoid redundant morphemes, yet that, along with the arbitrariness of that exponence, is exactly what we wish to capture. A strict model of feature realisation would predict that all verbs would inflect by means of one inflectional paradigm, with maximum differentiation of features: this means the use of proclitics (and nothing other than some automatic stem alternations) to realise features. This is not an accurate description of Skou agreement.

The fact that lexical stipulation on inflectional categories is also found in Lumasaaba and Greek suggests that provision for such lexical power is inherent in linguistic structure. The fact that it is simply not utilised in many cases does not detract from us positing the position of even inflectional morphology in the lexicon, just as, for instance, not all languages display evidence of the unergative/unaccusative split, or when they do realise it on different lexical items.

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\title{
Negation and Grammatical functions in Skou
}

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}

\section*{1. The Skou language}

Skou is known from the work of Cowan (1952a, 1952b, 1957), Galis (1955), Voorhoeve (1971, 1975 and elsewhere), Silzer and Clouse (1991), and Donohue (1999, 2000, 2002). It has been referred to as Sko, Skou, Səkou, and Tumawo, and is referred to locally as Te Máwo pílang nè ne ('Our, the Mabu people's, language'). Skou is related to other languages in the Skou family of which it is the westernmost member. \({ }^{1}\) It has many features typical of a language of New Guinea: SOV word order, some agreement on the verb, reasonably frequent use of verb serialisation, switch-reference mechanisms, and optional case marking.

This is shown in figure 1.
Figure 1. The Skou villages and other features west of the Tami River


There are 700 speakers of the language, almost exclusively in these three villages. Although the name Te Máwo pílang nè ne is used by speakers to refer to their own language, the name Skou is acceptable, and recognised as the 'official' way to refer to their language. I shall refer to the language as Skou, following recent linguistic references to the language and speaker preference. \({ }^{2}\)

\footnotetext{
1 More distant relations can be established with other members of the Macro-Skou family (including, but not confined to, Krisa (I'saka), Rawo, Puari, and Warapu (= Barupu)), albeit in a substantially different arrangement to Laycock's \((1973,1975)\) family tree. These more distantly related languages have morphological structures significantly different to those exemplified in Skou and the other languages discussed in section 4.3.
2 Skou has a fairly simple segmental phonology, with 13 consonants and 7 vowels, arranged in (C)V syllables. Nasalisation is contrastive on vowels, and five pitch melodies are present on words. Examples are presented in orthography: nasalisation is indicated by -ng, \(\neq /\) and \(/ \mathbf{a} /\) are written with the digraphs \(u e\) and \(o e\), high pitch is shown with ' and falling pitch with '. The representation of the other vowels and the consonants follows IPA conventions, except that \(y\) represents \([j \sim \xi\) \(\left.\sim \mathrm{dz} \sim \mathrm{d}_{\mathrm{J}}\right]\) (in a cline from younger to older speakers), and \(j\) represents \([\mathrm{g} \boldsymbol{j} \sim I]\) for older speakers, and [ \(\mathrm{d} \boldsymbol{3}\) ] for younger ones.
}

\section*{2. Negation in Skou}

Negation in Skou does not involve special verb inflections, as is the case in various other languages of New Guinea. Indeed, marking a sentence as negative precludes the use of certain aspectual options. \({ }^{3}\) Negation is marked by a particle \(\boldsymbol{k} \boldsymbol{a}\) that follows the predicate, regardless of the lexical category of predicate, as seen in (1) and (2):4

Nominal predicate
a. \(P e=i n g\) a \(\grave{e}-n e-n i ̀=n e\).

3SG.F=the wife-1SG.DAT-1SG.GEN=1SG.DAT
'She's my wife.'

Verbal predicate
(2)
a. Féung nì=re-re.
tomorrow 1SG=go-RED
'I'll go tomorrow.'
b. Féung nì=re-re \(\boldsymbol{k a}\).
tomorrow 1SG=go-RED NEG
'I won't go tomorrow.'
The same pattern is found with transitive predicates:
Transitive verbal predicate
a. Ke=ing a kóe \(k e=k\)-ang.

3SG.NF=the sago.cake 3SG.NF=3SG.NF-eat
'He ate the sago pancake.'
b. Ke=ing a kóe ke=k-ang ka.

3SG.NF=the sago.cake 3SG.NF=3SG.NF-eat NEG
'He didn't eat the sago pancake.'
A complication arises when we consider a predicate that contains an oblique phrase. The normal position for an oblique is following the verb; when negated, however, the oblique appears pre-verbally:
a. \(N i=r e\) Tangwáto.
1SG=go Tangwato
'I went to Tanjung Tangwato.'
b. Tangwáto nì=re ka.

Tangwato \(1 \mathrm{SG}=\mathrm{go}\) NEG
'I didn't go to Tanjung Tangwato.'

\footnotetext{
3 Specifically, it is impossible for negation to occur with the continuative / non-completive aspect that is marked by serialisation with the verbs \(i\) 'be' and \(l i\) 'do'.
4 The following abbreviations have been used in glosses of sentences and elsewhere. Portmanteau agreement markers use the following abbreviations: 1, 2, 3: first, second and third person; SG, DU, PL: singular, dual and plural number; DAT: dative; ERG: ergative; F: feminine; GEN: genitive; NF non-feminine. The other abbreviations used are: APPL: applicative; INSTR: instrumental; NEG: negative; RED: reduplication; SUBJ: subject.
}

Since obliques (other than instruments, which are case marked) are not in normal circumstances coded pre-verbally, we must question the status of the goal in sentences such as (4)b: the only bare pre-verbal NPs that are normally found are objects. Do these pre-verbal goals behave as objects, or obliques? \({ }^{5}\)

\section*{3. Testing functional status}

There are tests that can be used to separate oblique arguments from core ones, and, within the core, subjects from non-subjects (objects) and absolutive from ergative. These tests are:
- only transitive clauses allow optional ergative proclitics on nominal subjects
- only core arguments may appear raised in complements
- only absolutive core arguments may launch floated quantifiers

We shall examine the first two of these tests in order to determine the status of the goal or loacation in a negated sentence. The third test, involving floated quantifiers, is not useful in engative sentences as negation prohibits floated quantifiers, a point that we shall return to in section 5.

\subsection*{3.1 ERGATIVE CASE}

The possibility of ergative case marking appearing on the subject of a transitive clause is shown in (5):

Transitive clause:
Ke=bahúe-nì=ne pá ke=li fue a.
3SG.NF=elder.sibling-1SG.GEN=1SG.DAT house 3SG.NF=do there
'My elder brother built a house over there.'
optional ergative
(6) Ke bahúe nì ne \(\mathbf{k e}\) pá ke li fue a.

3SG.NF.ERG
Intransitive clause: no ergative possible
\(K e=b a h u ́ e-n i ̀=n e \quad k e=m o e n g\) pá fue a. 3SG.NF=elder.sibling-1SG.GEN=1SG.DAT 3SG.NF=sit house there 'My elder brother was in that house over there.'
(8) * Ke bahúe nì ne \(\boldsymbol{k e}\) ke moeng pá fue a.

3SG.NF.ERG
When an intransitive clause is negated, however, the ergative is possible:
Ke=bahúe-nì=ne \(\quad\) pá ke=moeng \(\boldsymbol{k a}\).
3SG.NF=elder.sibling-1SG.GEN=1SG.DAT house 3SG.NF=sit NEG
'My elder brother wasn't in that house.'
(10) Ke bahúe nì ne \(\boldsymbol{k e}\) pá ke moeng \(\boldsymbol{k a}\).

3SG.NF.ERG

\footnotetext{
5 The phenomenon described here, oblique arguments apprearing preverbally in negative clauses, applies to all (normally) post-verbal obliques. While most sentences here show locations and directional goals, recipients behave identically.
}
- Note that the ergative is allowed in negative sentences only if there is a location or goal that has been fronted. It is not a general property of negative sentences that they allow the ergative case to appear on subjects, as can be seen by comparing the following pair
(11) Ke=bahúe-nì=ne ke=i ka.

3SG.NF=elder.sibling-1SG.GEN=1SG.DAT 3SG.NF=stand NEG
'My elder brother wasn't standing.'
(12) * Ke bahúe nì ne ke ke i \(\boldsymbol{k a}\).

3SG.NF.ERG
Even a sentence that corresponds to a positive sentence with an oblique may not appear with ergative case marking unless the oblique is present:
(13) * Ke bahúe nì ne \(\boldsymbol{k} \boldsymbol{e}\) ke moeng \(\boldsymbol{k a}\).

3SG.NF.ERG
This matches the infelicity of ergative marking on two place verbs when there is no overt object; compare (5) above with the following:
(14) Ke=bahúe-nì=ne (\#** ke) ke=li fue a. 3SG.NF=elder.sibling-1SG.GEN=1SG.DAT 3SG.NF.ERG 3SG.NF=do there
'My elder brother did something over there.'

\subsection*{3.2 RAISING}

Another test for core status involves raising. Consider the following alternative codings of the same sentence:
\[
\begin{array}{lcc}
\text { Ke=barí } & k e=\text { fue } & {\left[\begin{array}{l}
m \grave{e}=p o e] . \\
\text { 3SG.NF=headman } \\
\text { 3SG.NF=see }
\end{array}\right.}  \tag{15}\\
\text { 'The headman saw you arrive.' } & & \\
\text { 2SG=come }
\end{array}
\]
(16) \(K e=b a r i ́ ~ m e ̀ ~ k e=f u e ~[~ m e ̀=p o e] . ~\)

3SG.NF=headman 2SG 3SG.NF=see 2 SG=come
'The headman saw you arrive.'
With transitive clauses not only the subject, but also the object may be raised:
\[
\begin{array}{llll}
\text { Ke=barí } & k e=\text { fue } & {\left[\begin{array}{ll}
\text { móe }
\end{array}\right.} & \begin{array}{l}
\text { mè }=p e ́] . ~ \\
\text { 3sG.NF=headman } \\
\text { 3SG.NF=see }
\end{array}  \tag{17}\\
\text { 3SG.NF } \\
\text { 'The headman saw you catch the fish.' }
\end{array}
\]
\[
\begin{align*}
& \text { Ke=barí mè } k e=f u e \text { [ móe mè=pé }] .  \tag{18}\\
& \text { 3SG.NF=headman 2SG 3SG.NF=see fish 2SG=catch } \\
& \text { 'The headman saw you catch the fish.' }
\end{align*}
\]
(19) Ke=barí móe \(k e=f u e\) [ mè=pé].

3SG.NF=headman fish 3SG.NF=see 2SG=catch
'The headman saw you catch the fish.'
It is not possible for an oblique to be raised, however:
\begin{tabular}{|c|c|c|c|}
\hline \(K e=b a r i ́ ~\) & \(k e=f u e\) & \(m e ̀=p o e\) & pá]. \\
\hline 3SG.NF=headman & 3SG.NF=see & \(2 \mathrm{SG}=\) come & house \\
\hline The headman sa & arrive at & & \\
\hline
\end{tabular}
* Ke barí pá ke fue mè poe
\begin{tabular}{ll}
\begin{tabular}{l} 
Ke=barí \\
3SG.NF=headman
\end{tabular} & \(k e=f u e\) \\
3SG.NF=see
\end{tabular}\(\quad\left[\begin{array}{cll}\text { móe } & m \grave{e}=\text { pé } \\
\text { fish }\end{array} \quad \begin{array}{l}\text { 2SG=catch }\end{array} \quad \begin{array}{l}\text { pa-long]. } \\
\text { river-mouth }\end{array}\right.\)
'The headman saw you catch the fish at the river-mouth.'
(23) * Ke barí palong ke fue móe mè pé

When a clause is negated, however, it is possible for the oblique to be raised:
\begin{tabular}{ll} 
Ke=barí & \(k e=l u ́ e\) \\
3SG.NF=headman & 3SG.NF=know
\end{tabular}\(\quad\left[\begin{array}{llll}\text { pá } & m e ̀=p o e & k a] . \\
\text { house } & 2 \mathrm{SG}=\text { come }\end{array} \quad\right.\) NEG
'The headman knows that you didn't arrive at the house.'
(25) Ke barí pá ke lúe mè poe ka.
(26) Ke=barí ke=lúe [ pa-long móe mè=pé ka]. 3SG.NF=headman 3SG.NF=know river-mouth fish 2SG=catch NEG 'The headman knows you caught the fish at the river-mouth.'
(27) Ke barí palong ke lúe móe mè pé \(\boldsymbol{k a}\).

The data from eligibility for raising in complements (illustrated here with data from verbs of perception, but also true for complements of verbal manipulation) also indicates that the preverbal goal or location is treated in the same way as an object.

These two tests indicate that the negated clause with a goal or location is transitive, and that a pre-verbal oblique is treated as a core argument not just in terms of its position in the clause, but also in terms of its syntactic behaviour.

\section*{4. Summary / Recapitulation}

We have found evidence for the following facts regarding negation in Skou:
- Skou is an S P V obl language;
- negation follows the predicate in a clause;
- an oblique, which normally follows the predicate, is found pre-verbally when the clause is negated;
- a pre-verbal oblique in such a negative clause behaves syntactically as if it were an object (more exactly, as if it were a non-subject core argument). The clause appears to be transitive.
With respect to judging this data, we need to note that:
- it is not the case that all pre-verbal nominals behave as either subject or object. \({ }^{6}\)
- it is typologically highly marked for a negative sentence to exhibit more transitive features than a positive one

\footnotetext{
6 It is also true, but not pursued here in details, that not all post-verbal nominals are obliques; some predicates such as 'be jealous of' and 'give' take objects that must appear post-verbally, and yet behave as objects in terms of morphosyntax; furthermore, some low-transitivity verbs such as fue 'see, look at' allow their object to be coded either preverbally or postverbally.
}

Firstly, as already mentioned in passing, instrumental NPs may appear preverbally; these nominals are marked overtly with the case marker \(=p a\), and do not show properties of either subjects or objects in terms of the constructions examined here (or other constructions that identify subject and object).
\begin{tabular}{|c|c|c|c|c|}
\hline \(K e=b a ̀\) & ing \(a\) & ke & ritóe & rangwaue \(=\) pa \\
\hline 3SG.NF=person & the & 3SG.NF & tree & axe \(=\) INSTR \\
\hline \(k e=l e ́\) & \(l i\). & & & \\
\hline 3SG.NF=fell be & do & & & \\
\hline 'The man is ch & pping & wn a tr & with & \\
\hline
\end{tabular}

The presence of such a nominal in an intransitive clause does not license the use of the ergative case:
\[
\begin{array}{lll}
P e=r a=w o ̀ ~ & \text { tang-ké=ke=pa } & p e=t e  \tag{29}\\
\text { 3SG.F=just=self } & & \\
\text { transport-3SG.NF.GEN=3SG.NF.DAT=INSTR } & \text { 3SG.F=3SG.F.go }
\end{array}
\]
* Pe ra wò pe tang ké ke pa pe te Nofé.

The instrumentals are also not eligible for raising:
(31) * Tang ké ke (pa) nì=lúe pe ra wò pe te Nofé 1SG=know

Secondly, any nominal may appear preverbally, indeed pre-clausally, if it is the topic of the sentence, as illustrated in the position of the goal in the example.
(32) Tangwáto báng fue, te=y-á hi t-o.

Tangwato beach that 3PL=3PL-walk westwards 3PL-seawards 'The beach at Tangwato is where they went to.'

Again, these topics do not behave as core arguments; they are priveleged in terms of coordinate reference, but do not license the appearance of an ergative case nor are they eligible for raising. As mentioned, this is not the same pre-verbal position as is found with goals or locations in negative sentences: these goals or locatives may appear following the subject, whereas this is not possible for a topicalised nominal:
\(\begin{array}{clllll}\text { (33) } & \text { Te } & \text { Tangwáto báng } & \text { fue } & t e=y \text {-á } & h i \\ \text { 3PL } & \text { Tangwato beach } & \text { that } & \text { 3PL=3PL-walk } & \text { westwards } & \text { 3PL-seawards }\end{array}\)
We can only conclude that the relative position of a nominal in the phrase structure does seem to be bear some importance for the purposes of grammatical function assignment. How can we model this?

\section*{5. In liew of a conclusion: towards an account of the data}

We can advance two preliminary hypotheses concerning the changing functions that we have seen in the preceding sections:
1. Objects are found when the particle \(k a\) appears because the 'negative' morpheme is in fact an applicative; creating an object is its primary function, and the negation is secondary;

OR
2. The grammatical function 'object' is assigned by a structural position, and this is the position in which goals and locations are found when they appear in negated clauses.
The first of these hypotheses appears to have some merit: in common with applicatives, we can see, when the morpheme \(k a\) is added to a clause the clause appears with one extra object. This argument is not tenable, however. It is quite possible, as we have seen, for a base intranstive clause to appear with \(k a\) and to acquire no new arguments. Similarly a transitive clause may appear with \(k a\) and acquire no second object, if there is no location or goal specified as part of the clause. Clearly the use of ka does not imply the automatic addition of an extra argument to the clause.

Another argument against the analysis of \(k a\) as an applicative is that there are independently attested applicatives in Skou, and they do not create preverbal objects in the fashion that the negated clauses display. When the applicative -na is added to manner-ofmotion predicates, the clause may take a goal; otherwise, the clause must appear without a goal, or the manner-of-motion verb must be serialised with a simple motion verb. For instance, the only way to add a direction to the clause
(34) Bàng \(n e=n-a ́\).
yesterday 1PL=1PL-walk
'Yesterday we walked.'
is with the addition of a motion verb, or with the applicative; the verb há 'walk' (and the other manner-of-motion verbs) cannot support a goal:
\begin{tabular}{|c|c|c|c|}
\hline Bàng & \(n e=n-a ́\) & ne & báng. \\
\hline yesterday & \(1 \mathrm{PL}=1 \mathrm{PL}-\) walk & 1PL.go &  \\
\hline 'Yesterda & we walked to & beach.' & \\
\hline
\end{tabular}

Bàng ne=n-á-na báng. yesterday 1PL=1PL-walk-APPL beach 'Yesterday we walked.'
\[
\begin{align*}
& \text { * Bàng ne=n-á báng. }  \tag{37}\\
& \text { yesterday 1PL=1PL-walk beach } \\
& \text { 'Yesterday we walked to the beach.' }{ }^{7}
\end{align*}
\]

Note that the applicative, when present, marks the applicative object as a post-verbal argument, in keeping with its status as the object of a low-transitive predicate (see footnote 4).

\footnotetext{
7 They may, however, support a location. This sentence is grammatical with the reading 'Yesterday we walked (around) on the beach.' Note that the locative is placed in a different position to the goal, appearing following an auxiliary, if present, and not preceding it. Compare the corresponding continuous clauses, where only the post-auxiliary oblique is grammatical:
(i) \(* N e=n\)-á báng ne \(t i\) (ii) \(N e=n-a ́\) ne ti báng. 1PL=1PL-walk beach 1PL.be 1PL.do 1PL=1PL-walk 1PL.be 1PL.do beach 'We are walking to the beach.'
}

This is an argument against the interpretation of the negative morpheme as having an applicative function (it would also have to be reanalysed as a post-verbal clitic).

The suggestion that the putative 'applicative' licences a predicate to support two objects runs counter to the evidence that there are no ditransitive verbs in Skou. Predicates that are traditionally thought of as ditransitive are coded with serial verb constructions in Skou, each predicate introducing a new object. Examine, for instance, the phrasal expression of 'give' in Skou. This predicate involves two transitive verbs, wé 'get' and leng 'give', each of which subcategorises for just two arguments.
'Ditransitive' predicate expressed by verb serialisation
```

Rópu ke=wé leng nì.
book 3SG.NF=get.F give 1SG
'He gave me a book.'

```

Despite this, we find that when a transitive predicate with an oblique in the clause is negated, there are two nominals that both display clause-level object properties, namely the ability to exhibit raising. The first two example sentences below show the alternative word orders for the clause, showing either pá or kóe occuring adjacent to the verb.

Negated transitive predicate with oblique
a. Ke=ing a kóe pá ke=k-ang
\(k a\).
3SG.NF=the sago.cake house 3SG.NF=3SG.NF-eat NEG
'He didn't eat the sago pancake in the house.'
b. Ke=ing \(a\) pá kóe ke=k-ang ka.
3SG.NF=the house sago.cake 3SG.NF=3SG.NF-eat NEG

In the following two sentences we can see that either the base object kóe or the displaced oblique pá may appear as the object of the verb \(p e=f u\) 'She saw', showing that both of them display this property that is typical of core arguments, but not of obliques.
(40) a. Kóe pe=fu pá ke=k-ang ka.
sago.cake 3SG.F=see.F house 3SG.NF=3SG.NF-eat NEG
'She saw that he didn't eat the sago pancake in the house.'
b. Pá pe=fu kóe ke=k-ang ka.
house 3SG.F=see.F sago.cake 3SG.NF=3SG.NF-eat NEG 'She saw that he didn't eat the sago pancake in the house.'

This suggests that the sentences in (39) are ditransitive. The complete dearth of rootditransitive predicates in Skou creates problems for an analysis that assumes that the object status is created directly by the position of the displaced oblique in the sentence, since we need to allow the predicate to show two positions for objects, whereas this is not attested elsewhere in the language.

The movement analysis of Chomskyan theory offers a simple account of the data that Skou presents to us. We assume that the structure of a transitive clause can be represented in an X '-theory phrase structure model with something like the following diagram: \({ }^{8}\)

\footnotetext{
8 I have applied a certain degree of 'pruning' of the trees, following the example of Bresnan (2001), for the sake of clarity.
}

Transitive sentence, annotated
(41)

and that obliques appear in a post-verbal, but yet VP-internal, position:
(In)transitive sentence with oblique

then we can model the kind of sentence seen in (4) with the tree seen in (41), showing that the goal or location can be reassigned to a position that is otherwise associated with the object of a clause, when the negative morpheme appears in the post-verbal position.

Apparent movement of oblique arguments to the object position


It is not problematic to suppose that the motivation for the displacement of the oblique nominal to a preverbal position is initiated by the appearance of the negative morpheme postverbally; there is clearly competition for that position, competition which the oblique nominal loses. Other support for this hypothesis is the fact that floated quantifiers, which also appear in the same position post verbal position, preceding an auxiliary, are also barred form appearing in the same sentence as a negative morpheme, or an oblique. This implies that there is a very tightly constrained phrase structure, which is indeed the case in Skou, and is a feature of other, both related and unrelated, languages of the North-central New Guinea region. One aspect of this tight phrase structure is that there is a position that may be filled by at most one word, and that this position is fully occupied by the negative morpheme, which takes precedence over the other classes of lexical items that can potentially occupy this position. The question that remains is that of the reason behind the assumption of object status by the displaced nominal, and a structural model of the grammar would attribute that to an automatic assignment based on the configuration of the nominal in the phrase structure. Some of the problems that are associated with this view, involving the lack of ditransitive predicates in the language, have been presented earlier in this section.

Now, given this model in a movement-based theory, we can interpret it in terms of a lexicalist grammar by assuming that there are two separate components. The first is the competition between the negative morpheme and the obliques, both of which vie for the post-
verbal position, with the locative or goal arguments being displaced. So far the two models do not show major differences.

The change in grammatical function status is more challenging. One immediate solution presents itself, assuming that the putative post-verbal obliques are in fact objects, but with low affectedness (as described in footnote 4), and that they are being displaced positionally, but not functionally. This can be shown not to be true: from a sentence like (38) it is possible to show the goal with raising, as in (99):
\begin{tabular}{llll}
\(N i ̀\) & \(p e=f u\) & rópu & \(k e=w e ́\) \\
1SG & leng. \\
'SG. & lesee. & book & 3SG.NF=get \\
'She sive
\end{tabular}

This has been shown not to be possible with the goals of motion verbs, which, together with the data on optional ergative marking, clearly indicates a difference in valency.

It might well be that the lexicalist interpretation of this data is there, waiting to be teased out of the movement 'metaphor'. But I haven't spotted it yet.

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\title{
The tonal system of Skou, New Guinea*
}

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}

\section*{1. Tone in the languages of New Guinea}

Whilst not widely publicised outside the circles of New Guinea linguists, a wide variety of tonal systems are found in the languages of New Guinea (see various publications following Wurm 1954, or a more recent synopsis in Donohue 1997). \({ }^{1}\) In most areas of New Guinea the lexical use of pitch distinctions is the norm, rather than the exception, and the kinds of tonal systems encountered in New Guinea reflect the full range of tonal diversity found anywhere in the world. The only main areas that are known to not possess tonal systems are, from the south moving anticlockwise, Kolopom island and the Trans-Fly region in the south, South-east New Guinea, the islands, Madang, the Sepik basin, and the delta and lands north of, and surrounding, the Mamberamo river. The area in which tone languages are known to be in New Guinea is shown in map 1 by shading. Note that some areas in this map which are not shaded, such as the Awyu area in the south-west inland from Kolopom island, are not known to be non-tonal, but lack sufficient description to definitively classify them as tonal; map 1 is then a conservative estimate of the area in which pitch is used lexically or grammatically.

This article presents an empirical study of the tonal system present in Skou, a language of the north coast of New Guinea, which presents some interesting insights into the behaviour of lexical tone when spread across words.

\section*{2. The Skou language}

Skou is known from the work of Cowan (1952a, 1952b, 1957), Galis (1955), Voorhoeve (1971, 1975 and elsewhere), and Donohue (1999, 2002, forthcoming). It has been referred to as Sko, Skou, Sekou, and Tumawo, and is referred to locally as \(T e\) Máwo pílang nè ne ('Our, the Mabu people's, language'). Skou is related to other languages in the Skou family of which it is the westernmost member, stretching across the north coast of New Guinea, extending past Vanimo to Leitre (Donohue 2002). More distant relations can be established with other members of the Macro-Skou family (including, but not confined to, Krisa (I'saka), Rawo, Puare, Womo, Sumararu, Barupu,

\footnotetext{
* I would like to acknowledge the help and inspiration given to me by Duane and Heljä Clouse, who scared me enough with tapes of Kirikiri that I didn't start any serious work on New Guinea tone for the next two years, and to Tida Syuntarô and Larry Hyman, who read this paper and provided insightful comments. The bad bits are my own doing.
1 Here and elsewhere I use the term 'New Guinea' to refer collectively to both the Indonesian province of Papua (formerly Irian Jaya), and the independent nation of Papua New Guinea.
}

Ramo and Sumo. See Donohue and San Roque (2003) for details. The language is spoken with minimal dialectal variation by the inhabitants of three villages, SkouYambe, Skou-Mabu and Skou-Sai, in the centre of the north coast of New Guinea (in Papua (formerly Irian Jaya); see Silzer and Clouse 1991). This is shown in figure 1.

Map 1. Tone languages in New Guinea


Figure 1. The location of the Skou family in New Guinea


There are 700 speakers of the language, almost exclusively in these three villages. Although the name Te Máwo pílang nè ne is the normal one used by native speakers to refer to their own language, the name Skou is acceptable, and recognised as the
'official' way to refer to their language. I shall refer to the language as Skou, following linguistic references to the language, speaker acceptance, and ease of typing. The name Səkou is the name used in Tobati, the western neighbour of Skou, to refer to the language and its speakers. The spelling Skou has become (along with Skouw and Skow, showing pseudo-Dutch influence) the standard spelling of this word in Indonesia, though linguistic works changed to Sko after 1971.

The materials presented here were collected by the author in 1998-2001, from people in Skou-Mabo and Skou-Yambe, while working on a cultural preservation project based in those villages. The materials reported here represent the conservative speech of Skou people from all three Skou villages, and are acceptable to all speakers with an active command of the language.

Skou has a fairly simple segmental phonology, with 13 consonants and 7 vowels, arranged in strictly ( C )V syllables; nasalisation is contrastive on vowels. Examples are presented in Skou orthography: nasalisation is indicated by -ng in the coda of the syllable with a nasalised rhyme, and \(/ \sharp /\) and \(/ \Phi /\) are written with the digraphs \(u e\) and \(o e\). The representation of the other vowels and the consonants follows IPA conventions, except that \(y\) represents \([\mathrm{j} \sim \mathbf{3 j} \sim \mathrm{dzj} \sim \mathrm{d} \mathbf{j} \mathbf{j}]\) (in a cline of frequency of appearance, from younger to older speakers), and \(j\) represents \([\mathfrak{j} \mathfrak{j}]\) ] for older speakers, and \([\mathrm{d} \xi]\) for younger ones. See the appendix for details.

\section*{3. Tonal contrasts in Skou}

In addition to its segmental phonological distinctions, the following contrastive, nonpredictable pitch patterns are found on words of one, two and three syllables in Skou, when pronounced in isolation. They are presented both with tone staffs and with Chao tone letters. I shall break from most presentations of tone systems and describe the phonology of tone in Skou from the phonetic basis, discussing the steps involved in deriving the phonological units, rather than proceeding from the abstract phonological units and presenting the the principles for deducing the phonetic nature of these units in speech. Most earlier work on tone in New Guinea takes this second standpoint, probably driven by a practical, orthography-oriented report that has been adopted by most earlier writers.

Table 1. Pitch contours on words of different length
\begin{tabular}{|c|c|c|c|c|c|}
\hline 1- \(\sigma\) & \multicolumn{2}{|r|}{2-б} & \multicolumn{2}{|r|}{3-б} & \\
\hline \(\left[\gamma^{-}\right]\) & 3(4)4 & \(\left[\left.\right|^{--}\right]\) & 3(4)4-43 & \(\left[\Gamma^{---}\right]\) & 3(4)4-44-43 \\
\hline [|-] & 22 & [|--] & 22-21 & [|---] & 22-22-21 \\
\hline & & [|- - ] & 22(3)-(3)44 & [ \(\mid-^{--}\)], [|--- \(]\) & 23-34-43 / 23-33-44 \\
\hline & & [|-\] & 23-(3)41 & [ - \(^{-}\)] & 23-43-21 \\
\hline [|]] & 41 & [ \(\left.{ }^{-}-\right]\) & 43-21 / 343-21 & [ \(\left.\right|^{-}-\)], [ [ \(\left.\right|^{---}\)] & 34-43-21 / 34-33-21 \\
\hline & & [ \({ }^{-}\)\] & 44-41 & [ \(\left.\right|^{--}\)\], [ \(\left.\right|^{--}\)\] & 34-44-41 / 33-44-41 \\
\hline & & [ \(\\) - ] & 42-21 / 42-11 & [ \({ }^{-}\)- - & 44-41-11 \\
\hline
\end{tabular}

The observant reader will notice that no tones are transcribed with the highest pitch ' 5 '. This is deliberate, since the transcriptions here represent the pitch contours heard in Skou Mabo. In Skou Yambe, perhaps one kilometre to the west, syllables that are reported in table 1 as 3(4)4 pitch are heard noticeably higher, 45 . To preserve this pan-dialectal difference I have restricted the transcription here. See Rose (1990) for a similar discussion of tonal variation in Thai.

Certain of the contour features present in the pitches described above do not have their basis in the tone system, but rather in the intonational phonology of the language, and the OCP. We may list a set of intonational principles that apply to any utterance in isolation:
- all upper tones show an initial rise to a level at the beginning of an utterance; this is only occasionally found when the tone has a falling contour;
thus 33,344 and 34 are positional variants of 44 .
- all tones show some fall in pitch at the end of an utterance;
thus 43 and 42 are variants of 44 , and both 11 and 21 are variants of 22.
- all tones accommodate the start or finish of a non-identical tone in an adjacent syllable;
thus 223 and 23 are variants of 22 preceding higher-pitched syllables; 43 and 33 are variants of 44 preceding lower-pitched syllables and 344 and 34 are variants of the high pitch following low pitched syllables. Similarly, the audibly convex pitch contour 341 is a predictable variant of 41 following a low-pitched syllable.
- tones dissimilate to some extent to avoid a series of identical pitches on adjacent syllables; this is especially true for high pitches (see (1) and its discussion in this section, and further on in section 6).
thus all the sequences \(34-43,34-44\) and \(34-33\) represent two identical high-pitched syllables in a row, 44-44, with obligatory dissimilation.

Applying the principles that we can infer from these automatic processes, and adding our knowledge of the pronunciation of the words when not in isolation, or at a phrase boundary, we can 'tidy up' the information in table 1 to arrive at the idealised underlying pitch contours shown in table 2.

Table 2. Pitch contours on words of different length ('cleaned up')
\begin{tabular}{lll}
\hline \(1-\sigma\) & \(2-\sigma\) & \(3-\sigma\) \\
\hline\(\left[\left.\right|^{-}\right]\) & {\(\left[\left.\right|^{-}\right]\)} & {\(\left[\left.\right|^{---}\right]\)} \\
{\([\mid-]\)} & {\([\mid--]\)} & {\(\left[\left.\right|^{---}\right]\)} \\
& {\(\left[\left.\right|^{-}\right]\)} & {\(\left[\left.\right|^{--}\right]\)} \\
& {\([\mid-\backslash]\)} & {\(\left[\left.\right|^{--}\right]\)} \\
{\([\mid]\)} & {\(\left[\left.\right|^{-}\right]\)} & {\(\left[\left.\right|^{--}\right]\)} \\
& {\(\left[\left.\right|^{-} \backslash\right]\)} & {\(\left[\left.\right|^{--}\right]\)} \\
& {\([\mid \-]\)} & []\(\left.^{-}--\right]\) \\
\hline
\end{tabular}

Examining the pitch contours in table 2 it is immediately apparent that:
- there are less contrasts on monosyllables than on polysyllabic words;
- disyllabic and trisyllabic (and, though the data is limited, also four- and five-syllable words) all show the same number of contrasts, regardless of the number of syllables in the word;
- all the pitch contours observed can be described in terms of combinations of tonal units, which at the syllable level are L, H or HL (falling).
The fact that the number of contrastive pitch patterns found on a word does not increase as the number of syllables of the words under consideration increases suggests that we are dealing with either a complicated series of tone sandhi processes, which serve to collapse a large number of underlying distinctions, or a word-tone system, as opposed to a syllable-tone system (pace the description of Skou in Donohue 1997). Ross (1980), describing the tones of Dumo, a closely related language, suggested that there were three tones, a high, a fall, and a low, with a rule that converted falling tones to high tones preceding high or falls. This sandhi rule is shown in (1).

Ross' tone sandhi rule for Dumo
\[
\begin{equation*}
\mathrm{F} \rightarrow \mathrm{H} / \ldots \mathrm{F}, \mathrm{H} \tag{1}
\end{equation*}
\]

The motivation for such a rule is clear, involving the assimilation of the end point of the fall to the high pitch associated with the start of the following syllable. We might express the same rule more clearly in terms of H and L tonal units as follows:

Ross' tone sandhi rule for Dumo (restated)
(1)


Applying this to the pitch contours seen for disyllabic words in table 2, a similar rule would appear to apply in Skou as well: the three tones of the monosyllables are found in all combinations except FH and FF. Of the logical \(3 \times 3=9\) combinations, two are ruled out by tone sandhi rule, and the remaining 7 are attested. Furthermore, across morpheme boundaries the tone sandhi rule appears to operate productively: when hoe \([\mid \]\) 'sago' is suffixed with \(n i[|\mid]\) ' 1 SG.GEN', the resulting pitch contour is \([\mid-\backslash]\), not
*[|\\]. Based on this data, then, it seems that we can confirm an analysis of the tonal system in Skou as having three tones and a productive tone sandhi rule that limits the perceived patterns on polysyllabic roots. Note that here and elsewhere I refer to syllables, and not morae or other possibly relevant units. While initially merely convenient, the fact that syllables in Skou are maximally limited to V or CV structures means that the distinction between syllable and mora is not motivated by any languageinternal data.

With three-syllable words, however, a different pattern emerges. Given the restrictions imposed by the tone sandhi rule we would expect a total of 17 different pitch contours (the figure is obtained by calculating the maximum number of combinations of pitch contours on three sequential syllables, each with three possibilities (assuming syllable-based tone assignment), which is \(3 \times 3 \times 3=27\), and then subtracting 10 , the number of FF or FH sequences that appear in this list of 27 possible permutations [HFH, HFF, LFH, LFF, FHH, FHL, FHF, FFH, FFL, FFF]). There are, in fact, less than half this number of pitch contours, with a total of only seven contrasts, the same number of contrasts found on disyllabic words. Clearly the tone sandhi rule alone is not enough to account for the data here.

The fact that exactly the same number of contrastive pitch patterns that are found with disyllabic and trisyllabic roots, and that the same patterns are descriptively adequate for longer words, suggests that the best description of the tonal system of Skou is as a word-tone system, in which a tone melody is spread over the entire word (with some complications that go beyond most characterisations of word-tone languages (see Donohue 1997, James 1994), as will be explicated in the following section). The discrepancy between monosyllabic contrasts and polysyllabic contrasts represents an interaction of the tone melodies with a series of restrictions on pitch realisations, but the patterns seen in table 2 can be described in terms of representing the following series of underlying tone melodies:

Table 3. Pitch contours and tone melodies
\begin{tabular}{|c|c|}
\hline Underlying melody & Pitch contours \\
\hline H & \(\left[\left[^{-}\right],\left[\left[^{--}\right],\left[\left[^{--}\right]\right.\right.\right.\) \\
\hline L & [ [-], [|--], [|---] \\
\hline LH & [ \(-^{-}\)], [ \(\left[^{--}\right.\)] \\
\hline LHL & [|-\], [|---] \\
\hline HL & [|\], [|--], [|---], [|- \(\\) ], [|-- \({ }^{-}\)], [|\-], [ \({ }^{-}\)\-] \\
\hline
\end{tabular}

The complications remaining involve the lack of complete contrasts on monosyllables, and the fact that, for polysyllabic words, there is more than one phonetic contour associated with the HL melody. These points shall be discussed in the following section.

\section*{4. Restrictions and extensions of the analysis}

The differences between monosyllables and polysyllabic words involve the lack of LH and LHL melodies affiliated with monosyllables, and the lack of variety in HL melodies on monosyllables. It is not surprising that these should be the tone melodies that show restrictions with respect to their realisation on single syllables; Sundberg (1979) shows that \(\mathrm{F}_{0}\) drops are easier to implement than \(\mathrm{F}_{0}\) rises; Bao (1999), quoting Cheng (1973), documents the relative scarcity of rising tones versus falling or level tones in Chinese languages, and Zhang (2002) describes the restriction on similar tone melodies on monosyllables in Mende. Gordon \((1999,2001)\) presents some syllable-weight based explanation for these patterns.

In addition to the lack of a LH or LHL melody being found on a monosyllabic root, we can also note that there are no cases of a sequence of LH being found on a single syllable (producing a rising pitch on a single syllable): there are no syllables, in monosyllabic words or otherwise, in which the pitch contour rises: * [//], * [//-], * [|-/]. This may be formalised as a ban on a L and a H both attaching to the same syllable, in this sequence. This is shown in (2).


This accounts for both the lack of LH and LHL melodies on monosyllables, and the fact that (for instance) a LHL melody, when affiliated with a disyllabic root, results not in a [[|/ -] pitch contour, but [|-\].

The variety of pitch contours found with a basic HL melody can be accounted for by the appearance of accents: not only the melody, but also a phonologically specified accent point is required to fully indicate the tonal contour. (This notation is also similar in effect to Leben's (1982) notion of lexically linking tonal elements to particular syllables. The fact that in Skou this device is employed in a large proportion of the lexicon, and not just a small 'residue', implies that, rather than being treated as lexical aberrancies, these phenomena should in Skou be assigned by rule.) The location of this accent is shown here with a ' preceding the tonal unit that is in the same position (final, penultimate) as the location of the accent. An accent is an attractor for tonal units: rather than being assigned according to automatic principles of tone spreading, the accent indicates that all relevant tonal units must attach to the specified syllable, after which they spread over the rest of the word by general principles of association (a similar device is employed by Kagaya in his study of Bakueri 1992).

On a disyllabic root, the presence or absence of an accent, in combination with a HL melody, results in the following different tonal assignments and surface pitch contours.
\begin{tabular}{|c|c|c|c|}
\hline No accent & [ \({ }^{-}\)-] & \[
\begin{aligned}
& \sigma \quad \sigma \\
& \mid \\
& H
\end{aligned}
\] & HL \\
\hline Accent on final syllable & [ \({ }^{-}\)\] &  & H'L \\
\hline Accent on penultimate syllable & [|\-] &  & 'HL \\
\hline
\end{tabular}

The 'derivation' of the second of these contrastive pitch contours is shown below to illustrate the principles involved. At the first stage, step 1, we can see simply the lexical specification for accent and for tone melody. This information is purely stipulative, and so is specified in the lexicon, as it is not assigned by any rule, either universal or language-specific. The first step in the process of applying a pitch contour to the word comes with the pre-linking of all tonal units to the accented syllable, seen in step 2. Following this, automatic processes of tone spreading apply to ensure that there is a tonal unit associated with each tone bearing unit.
\begin{tabular}{llll} 
(3)' & Step 1 & lexical information & \begin{tabular}{l} 
Syllables: \\
Tone melody: \\
\\
\\
Step 2
\end{tabular} \\
& & \(\sigma \quad \sigma\) \\
& Accent: & H L
\end{tabular}

The lack of contrast in the pitch contours of monosyllabic words with a HL melody is then accounted for by the lack of syllables for this contrast to be realised. Compare the different pitch contours achieved with HL melodies on disyllabic words with the predicted results from monosyllables. Since there is only one syllable over which the tone melody can be realised, there is no perceptual contrast between the (hypothesised) differing underlying tone melodies (though see section 5 for a discussion of the phonological contrast). We can see how the different phonological specifications would result in identical tonal melody assignment when applied to monosyllabic words.
(4) No accent

Accent on final syllable
[|]
[/]]

' \(\sigma\) H'L
\(\widehat{\mathrm{H} \mathrm{L}}\)

'HL


Note that there is no evidence for the existence of a difference between \(\mathrm{H}^{\prime} \mathrm{L}\) and 'HL as phonologically different entities on monosyllabes, as they both result in a simple falling pitch, the same as is heard with HL. The evidence for these being separate entities comes from examining the behaviour of the tone of these morphemes when it is spread over two or more syllables, as a result of suffixation or compounding (see section 5).

It is assumed that accents are not unique to HL melodies, nor to polysyllabic roots, but are only restricted by the same parameters that are found elsewhere. Accents are restricted to not appearing with LH melodies, paralleling the restriction blocking LH melodies on a single syllable. This restriction prevents any specified accents from being found on words with underlying LH or LHL melodies.



The question of the presence of putative accents on words with H and L melodies can be resolved by appealing to the fact that, since these melodies represent level tones, there would be no difference between those with accents and those without. For instance, a disyllabic lexeme with the tone melody H would show a HH pattern regardless of the position, or existence, of an accent.
(6) \(\left[\left.\right|^{--}\right]\)


Identical tone spreading is found in words with a L tone melody; since there is only one tone unit in the melody, the placement, or existence, of an accent is immaterial to the realisation of the single tone unit spread over the entire word.

A further restriction on the placement of accents becomes apparent when we consider three-syllable words. By analogy with the different three HL melodies on disyllables, we would expect four melodies on trisyllables: [| \({ }^{--}\)], [ \(\left.\right|^{--}\)\], [ \(\left.\left.\right|^{-} \backslash-\right]\), and [|\--], all lexemes with HL melodies and the following inflectional specification: \(\sigma \sigma\) \(\sigma, \sigma \sigma ' \sigma, \sigma{ }^{\prime} \sigma \sigma\), and ' \(\sigma \sigma \sigma\). In fact the last of these options is not found, and in general
we can state that there is no evidence for accents being assigned anywhere except the last two syllables of a word.

Note that the analysis here has implications for the architecture of tone, at least as it applies to Skou. Informally we have been representing the relationship between the tone melodies and the segmental tier as displaying no intermediate levels, such as tonal root tiers. Thus for the HL melodies in (3), the melodies were shown as applying directly to the syllables on the segmental tier. This is necessary, since the assignment of the elements of the tone melodies is dependent on the ability of the tonal melody to 'scan' the segmental tier and to assign differentially depending on the presence of an accent. Compare the last of the modelled tone melodies in (3) with that in (7), which demonstrates the problems encountered if we assume a tonal root node. When the tones are associated with a root node before associating with the segmental tier, the differences between the different accents are lost on multisyllabic words.

Accent on penultimate syllable: modelled with a tonal root node


We can see that the models presented in the section, in addition to being descriptively adequate, are also motivated by an appeal to other models of the architecture of tone. The fact that there is no support for a tonal root node is also tied in to the lack of a register feature in Skou; while there are five contrastive tone melodies in Skou, H L LH LHL and HL, realised on disyllables as [ \(\left.\right|^{--}\)], [|--], [|--], [|-\], and [|-], there are no contrasts in height other than H versus L : there is only one falling tone, and only one rising tone, for instance, so there is no need to posit (after Bao 1999) representations such as the following, which incorporate both a register node and a contour node:
(8) Structure of tone Possible model of Skou LH tone Possible model of Skou H tone




The only possible use of a register feature would be if we were to model the LHL melody as involving underlyingly just a rise or a fall, and being differentiated from the LH or HL (as appropriate) by a register feature. This methodological account would not, however, be based on any phonetic evidence.

\subsection*{4.1 MORAIC STRUCTURE: A POSSIBLE ALTERNATIVE}

A possible solution to the question of the structure of tone on the syllable is to assume that the syllables of Skou are made up of two mora, each of which is potentially a tonebearing unit. There is a simple choice of high or low associated with each mora (with
the same conditions that rule out any rise appearing on a single syllable). The lack of a third moraic position for tonal assignment means that the lack of a LHL melody being realised on a single syllable is expected, and not stipulative.

While robust in the treatment of tonal properties, the complete lack of supporting data for a complex moraic structure (Skou does not have codas, vowel length distinctions, or any phonological diphthongs) makes this analysis, in the end, as ad hoc as any other, since it exists purely to support a model of tonal behaviour.

\subsection*{4.2 UNDERSPECIFICATION: A PREFERABLE ALTERNATIVE}

Another way in which we could model the Skou tonal system would be to propose that there are, in fact, no L-melodies in the tonal inventory. We would assume, contra table 3, the following set of underlying melodies: H, HL, LH and LHL (the treatment of accent is identical under this analysis to the previous account). Those morphemes which appear with a consistently low pitch, [|-], [|- -] etc., are simply those that are not assigned one of the phonologically specified tone melodies. This would then explain why, of all the compound forms discussed in the following section, low-pitched melodies are not able to dominate and overwrite a preceding tone melody, when compounded. Rather than the L melody displaying 'special' behaviour, we have an example of a phonologically toneless morpheme acquiring the tone melody of another morpheme in the same compound, which would be expected behaviour. The marking of past tense, and the partial marking of dative case, by low pitch can be explained not as a result of a low tone melody replacing another tonal melody, but by a process of tonal stripping, in which the tone melody associated with a morpheme is removed.

In the discussion that follows \(L\) will still be written as if it was an affiliated tone melody, even though the most plausible solution appears to be one with only found melodies, and a default low-pitch assignment for phonologically toneless morphemes.

\section*{5. Compounds, and evidence for more than three distinctions on monosyllabic roots}

When two roots are compounded together the tonal specification of the final element of the compound is spread over the whole word; the two tones do not interact. For instance, the general classifier for flying creatures is táng 'bird', which has a high pitch, \(\left[^{-}\right]\). The name of a large bat species is tangóe, with \(\left[-^{-}\right]\)pitch. This is assumed to be the result of the H tone melody of 'bird' being overwritten by a LH melody that is associated with the specifier -oe 'bat species'. The process can be modelled as follows:
(9)



[ \({ }^{-}\)] (not found in-

'bird' \(\begin{aligned} & \text { dependently) } \\ & \text { 'species' }\end{aligned}\)

A complex tone melody may also be overwritten in this way. In the following example the compound tángrúe 'handle of a machete' displays a [ \(\left.\right|^{-}\)-] contour, reflecting a H melody. When it is independent of the compound the element tàng 'blade' is found with a [ \(\mid \mathrm{l}]\) pitch, reflecting a HL melody. Clearly the H melody of the second element of the compound overwrites the complex melody of the first.


The only exception to such overwriting of tones is found when the tone of the last element in the compound is a low tone. Low tones do not cause the tone of the rest of the compound to dissociate, but are rather themselves overwritten or ignored. \({ }^{2}\) Thus, for example, we might expect that 'salt', a compound composed of tí H 'sea' and na L 'flesh', would appear with a L tone melody spread over the two-syllable word. This is not the observed result, with the compound having a high tone throughout: tíná.



This is suggestive of an analysis by which a L tone melody associated with a word is in fact the absence of an assigned H tonal unit, in isolation or in combination with other tonal units. This is an analysis to which I shall return in section 7, where I discuss the behaviour of apparently toneless clitics.

The morpheme kung LHL 'crustacean' provides further evidence of the spread of tones over the domain of a L melody. When kúng, which appears as a high-pitched syllable meaning 'small crab species' when it occurs alone, is found with a following morpheme specified for a L tone melody, the LHL of kúng overwrites the L and spreads over two syllables, being realised as one L and one HL syllable. Similarly when an apparently disyllabic L-melody morpheme is added to kúng the LHL melody spreads over the resulting three syllables, surfacing as \(\mathrm{L}, \mathrm{H}\) and L .

\footnotetext{
2 There is one exception to this, the case of a floating L tone. This is discussed in section 7.
}
\begin{tabular}{|c|c|}
\hline k fij & t a \\
\hline V & + V \\
\hline \(\sigma\) & \(\sigma\) \\
\hline (L) H (L) & L \\
\hline \(\left[^{-}\right.\)] & [|-] \\
\hline 'crustacean' & 'canoe \\
\hline
\end{tabular}

'empty shell'
\begin{tabular}{|c|c|c|c|}
\hline k if & W 3 & k ¢ix W & k î. \({ }^{\text {w }}\) \\
\hline V & + V | & \(\rightarrow \vee\) V & \(\rightarrow \vee \mathrm{V}\) \\
\hline \(\sigma\) & \(\sigma \sigma\) & \(\sigma \quad \sigma \quad \sigma\) & \(\sigma \quad \sigma\) \\
\hline \[
\stackrel{\mid}{(\mathrm{L}) \mathrm{H}(\mathrm{~L})}
\] & \[
\underset{\mathrm{L}}{ }
\] & LH,-' ' & L H \\
\hline \(\left[^{-}\right]\) & (not found independently) & & [|---] \\
\hline 'crustacean' & 'hermit crab' & & 'hermit crab \\
\hline
\end{tabular}

Further examples of different tones being overwritten by others are given in the appendix.

Double overwriting is also found when a compound is created from an existing compound, and so has the structure \(\left[\left[\left[\operatorname{root}_{1}\right]_{\omega} \operatorname{root}_{2}\right]_{\omega} \operatorname{root}_{3}\right]_{\omega}\). One such compound is tángrángpoe \(\left[\left.\right|^{--}\right.\)-] 'twelve-wired bird of paradise', which is composed of tángráng [ \({ }^{--}\)] 'bird of paradise' and poe HL 'twelve-wired bird of paradise', where tángráng is itself a compound of táng \(\left[\left.\right|^{-}\right]\)'bird' and ráng \(\left[\left[^{-}\right]\right.\)'sun'. When táng and ráng combine there is no change in tone, since both specify a H melody. The final compound has a single H melody, which is lexically associated with ráng. When combined with the species name, poe [ \(\ \backslash]\), which does not occur on its own, the HL pitch of this element overwrites the H associated with the compound tángráng.

In addition to the tone of the first element overwriting the low tone in the second element of the compound, the combined syllable structure of the compound is the domain for the assignment of tonal accents. This can be illustrated with the following compound, 'tulip leaves', composed of the elements ápólè 'kind of edible leaf; tulip', with a \(\mathrm{H}^{\prime} \mathrm{L}\) melody resulting in a \(\left[\left.\right|^{-}-\backslash\right.\) pitch contour, and \(h a\) 'leaf', which has a L melody and so a [|-] pitch contour. Here we can see, through the shift in the accent, that the tone assignment of the first element in the compound has not simply combined with the second element, but rather has overwritten it. The resulting pitch contour shows an accent on the syllable that constitutes the morpheme 'leaf', which previously showed no evidence of such a specification: [ \(\left.\left.\right|^{---} \backslash\right]\).


Notice that not only is the tonal melody of ápólè spread over the entire compound, but also the information regarding the position of the accent is now applied to the compound as a whole, with a constant final-syllable placement.

A similar example of L tonal melodies being eliminated can be seen in the word pátángke 'kingfisher', which is morphologically composed of the roots pa L 'water', táng H 'bird', and the bound form kè HL 'kingfisher'. We can hypothesise that the L melody of 'water' is erased by the following H in 'bird', by the principle that L tones are always overwritten by a more specified tone melody, leaving a H-melody compound. We do, however, have direct evidence (from the phonetic forms heard) that any subsequent H -tone melody on the two syllable compound is then erased by the presence of a non-L tone melody on the final element of the compound, the HL. The final resulting three-element compound displays only the tonal characteristics predictable from the HL melody of the final element in the compound.

One interesting result of this rule of tonal suppletion in compounds is that it allows us to investigate the tone of a monosyllabic lexical item when it appears spread over two or more syllables, thus offering a positive answer to the question of whether or not there are more underlying phonological contrasts on monosyllabic roots than appears to be the case based on the phonetic data of them in isolation. For instance, the noun hòe 'sago' is a monosyllabic root pronounced with a falling tone: hòe [ \(\mid \lambda]\). When it is combined with a following element, and that element has an inherent low tone, then, by normal conventions, the tone of the first element of the compound prevails, in this case the HL melody of 'sago', and is spread over the now disyllabic base. We would expect the disyllabic compound to shown a [ \(\left.\right|^{-}-\)] pitch contour, by analogy with the tone spread in cases like the following compound or pá 'house' and ràng 'house pole'.


In this example we can see that what is a falling pitch on one syllable spreads over two syllables to a disyllabic expression with one syllable bearing a high pitch and the
other bearing a low pitch. Identical patterning is found when kue-HL 'jaw' \({ }^{3}\) combines with \(t a \mathrm{~L}\) 'hair' resulting in kúeta \(\left[\left.\right|^{-}-\right]^{\text {'beard'. This would be our expected target for }}\) the compound composed of hòe 'sago' + na 'flesh', since hòe has a falling pitch, and na is low-pitched, and hence sees its tone melody overwritten. In fact we find a falling-low pitch contour, [|l-]. This gives evidence for the tone melody associated with hòe in fact being a 'HL melody, and not either a H'L or a HL melody.


Three-syllable (and longer) words show exactly the same possibilities as are found for two-syllable words; furthermore, when observing trisyllabic (and longer) words we can note that there are accents located further than two syllables from the right edge of the word. Examine the following possibilities for the pitch realisations of a HL melody on a trisyllabic word. Only the first three patterns are attested, with the final pitch pattern, which would arise from a word that was specified with an accent on the first of its three syllables, not found in the Skou data.

\footnotetext{
3 This morpheme is not found as an independent lexical item: kúeé 'jaw+bone' is the normal collocation for 'jaw', with the H tone melody of \(e\) 'bone' spreading over the whole compound. Speakers are, however, able to produce the syllable in isolation.
}


Why should there be this restriction on the placement of an accent? There are no clear answers, but it is worth noting that there are no unambiguously trisyllabic roots in the language. While there are many trisyllabic words, they are all composed of more than one morpheme. Some of the more convincing roots are plant terms, such as sangbiki 'pumpkin' and the already-mentioned ápólè 'kind of edible leaf; tulip', but even these are quesitonable, given, for instance the existence of the root pó 'vegetable', and the frequent pseudo-prefixal element \(a\) - in plant names, and the word pupúki 'eggplant', with the same final -ki and the same LHL melody as sangbiki. One possibly quadrisyllabic animal name, ibábúeli 'wasp', is known, but almost all other trisyllabic words have an easily identifiable first syllable that represents a generic or species designator. This restriction on the shape of roots may influence the phonological possibilities on multisyllabic roots.

\section*{6. Tone assimilation in phrases}

There is some degree of dissimilation of tones across adjacent words, and also some degree of spread. The following sentence shows a different realisation of the pitch to that which we would expect, with the fall on nì not dropping nearly as low as is normal, and the low pitch associated with kang 'I eat' being realised lower than normal.
\begin{tabular}{|c|c|c|c|c|}
\hline \multirow{3}{*}{(18)} & & & Phonologically specified tones & Pitch \\
\hline & Móe & nì=k-ang-kang. & H HL L-L & 4443 11-11 \\
\hline & fish & \(1 \mathrm{SG}=1 \mathrm{SG}\)-eat-RED & & \\
\hline \multicolumn{5}{|c|}{'I'll eat (a) fish.'} \\
\hline
\end{tabular}

The reduction in drop of the fall might be thought to be a result of identical tones cancelling each other out; in this case, the L of kang absorbs the L part of the tone melody on nì, leaving a sole H .

'fish' '1SG' 'I eat'
Similarly \(n i=e\) 'I go to the east', HL L, surfaces as H L (see appendices). An opposite example can be found when the following word has a high tone; in this case the contrast between the tones is maintained at the expense of the falling toneme, and so the H or the HL melody is absorbed by the preceding móe. Note that this, in combination with the previous data, allows us to rank the absorption of tones: a L tone absorbs an adjacent L in preference to a H absorbing an adjacent H .
(20) Móe nì=wí-wí.

H HL H-H
4322 34-43
fish \(1 \mathrm{SG}=\) get.F-RED
'I'll catch a fish.'


Spreading can be observed in the following utterance. The fall that is phonologically associated with the verb \(\grave{e}\) is realised over both the syllable of the verb, and the following L-tone (toneless?) syllable.
\[
\begin{align*}
& t e=\grave{e}=k o,  \tag{22}\\
& \text { 3PL=cook=OBV } \\
& \text { 'and they cook them, and then...' }
\end{align*}
\]

In the following example the HL associated with the verb spreads to the left, as there is no following syllable. The fact that there is only minimal spreading of the H to the left in \(t e=\grave{e}=k o\) shows that the preferred direction for tonal spreading is to the right.
\[
\begin{align*}
& \text { te=pèng. }  \tag{23}\\
& \text { 3PL=leave } \\
& \text { 'they leave (the village).' }
\end{align*}
\]

We have seen, then, that there are processes of tonal disimilation operating to avoid the loss of tonal contrast, and also processes of non-low tones spreading over
surrounding low tones, which suggests that the surrounding low tones, all grammatical morphemes in the data so far examined, are in fact phonologically toneless.

\section*{7. Tonal suppletion}

The previous section has demonstrated that a low tone melody is always disassociated from their segmental tier when it occurs in competition with another tonal melody. There is, however, one instance in which a low tone overwrites other tones.

Past tense in Skou is not marked by any segmental changes, but is indicated by a low tone on the verb. (It could be argued that past tense is segmentally marked by the absence of reduplication, found in future and intentional clauses, and the absence of an auxiliary, found in continuous and intentional clauses. Nonetheless, these TAM categories do not show the tonal behaviour that is found in past tense.) Compare the following examples, which show the pitch patterns in two different tenses for three different verbs. The tenses shown contrast a future tense, marked by reduplication, with a past tense.

Table 4. Tonal changes for tense
\begin{tabular}{lllll}
\hline & future & & past & \\
\hline 'roast' & lala & {\(\left[\left.\right|^{--}\right]\)} & la & {\([\mid-]\)} \\
'vomit' & yaya & {\([\mid--]\)} & yas & {\([\mid-]\)} \\
'scratch' & papa & {\(\left[\left.\right|^{-} \backslash\right]\)} & pa & {\([\mid-]\)} \\
\hline
\end{tabular}

The simplest account of these alternations is that the verbs 'roast', 'vomit' and 'scratch' (and many others like them) are assigned a tone melody lexically (H, L and HL, respectively), which is realised (with appropriate tone sandhi) in the future, and other, tenses, but which is stripped off in the past tense, appearing to be replaced with a L tone melody (though more plausibly it is simply removed, through a subtractive process associated with the past tense - see 4.2). We can model this for the case of 'scratch' as follows:


This model suggests a solution to the question of why the low tone manages to overwrite a lexically specified tone here, but not in compounds. While the compounding places two melody+segment units in a single prosodic word, the case of past tense low tone suppletion takes a melody+segment unit, the verb root, and adds a tone melody that has no segments associated with it. The only realisation of the tense morpheme is the tonal melody, while the verb root has both a tonal melody realisation
and a segmental realisation. For this reason the L tonal melody is 'allowed' to overwrite the lexical tonal melody of the word.

If this sort of tonal suppletion were not allowed, of course, we would never see any evidence for this morpheme, since it has no segmental form. We could theoretically posit any number of suprasegmental morphemes that do not successfully overwrite the tone associated with the segmental item (for instance, by being the first element in the 'compound' with the lexical element), but there would be no evidence for their existence.

Another case of a probably tonal morpheme is found when we examine the forms of the plain pronouns and compare them with the genitive and dative pronouns. The different sets are given in table 5 .

Table 5. Free, genitive and dative pronouns compared
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & \multicolumn{2}{|l|}{Free pronoun} & \multicolumn{2}{|l|}{Genitive Pronoun} & \multicolumn{2}{|l|}{Dative pronoun} \\
\hline 1SG & ni & [|\] & ni & [|] \(]\) & ne & [|-] \\
\hline 2SG & me & [|1] & me & [ 1 ] & me & [|-] \\
\hline 3SG.NF & ke & [|-] & k e & \(\left[^{-}\right.\)] & k e & [|-] \\
\hline 3SG.F & pc & [|-] & pc & [|]] & pe & [|-] \\
\hline 1PL & \(n \mathrm{E}\) & [|-] & ne & [|]] & ne & [|-] \\
\hline 2PL & \(\varepsilon\) & [|-] & \(\varepsilon\) & [ 1 ] & \(\varepsilon\) & [|-] \\
\hline 3PL & \(t\) & [|-] & te & [|] & \(t\) & [|-] \\
\hline
\end{tabular}

The high, rather than falling, pitch on the 3SG.NF.GEN pronoun is discussed in section 9 .

Just as with the past tense being marked by a low tone that overwrites the tone of the lexical item, we can most easily account for this pronominal data by assuming that the free pronouns represent the most basic for of the pronoun, and that the genitive pronouns are formed by the addition of a (no longer productive) morpheme (or formative), 'genitive', [ \([\backslash]\), and the dative set if formed by the addition of a frozen dative morpheme, 'dative', \(\boldsymbol{\varepsilon}\), [|-]. In both cases the tones of these derivational morphemes overwrite the tone of the underlying pronoun, and so again we see a case of a low tone overwriting a more complex tone, though in this case it is associated with some segmental material. In the case of the dative set we can see that there is a vowel associated with the morpheme that has no corresponding position on the syllable tier, and so is realised by overwriting the vowel of the pronoun. The combination of the first person singular pronoun and the dative formative is shown in (25), showing both the overwriting of the HL tone melody associated with first person singular, and the overwriting of the vowel as well.


We can demonstrate the need to posit a segmentally specified, but syllabically deficient morpheme by reference to the focus marker \(=a\), which does not supplete the vowel of a pronoun to which it attached: mè a 'you PROM', not *mà.

The examples seen in this section show that special treatment is afforded to the low tone in compounds when it is not associated with any syllable structure. The last example shows that even with segmental material, if that material is not linked to the syllabic tier the tone is still capable of overwriting the tone of the lexeme.

\section*{8. Mismatches in the definition of 'word'}

So far we have described the process of tonal suppletion and tonal spread in words in Skou. There is one instance in which, if we are to hold to the analysis currently advocated, we must assume that there are two tonal contours associated with the one word.

Examine the following data involving possessive marking on nouns. In the first example we might argue either that the HL associated with the genitive morpheme spreads over the whole word, and that the genitive tone is in fact a 'HL underlying tone, or that the underlying tones of each of the morphemes present are realised. The tonal structure of the word, assuming the first analysis, is shown in (26).


Here we can see that both the tone melody associated with the lexical root and the tonal melodies lexically associated with the inflectional material are preserved in the complex word. The disassociation of the L associated with the dative suffix takes place under the general provisions for the automatic simplification of like tonal units when they are adjacent.

Confirmation of this first analysis might be thought to be found in words with a lexical falling tone on the noun root, in which the lexical tone is realised as a high tone. This is shown in (27), but we should note that an alternative analysis, in which the HL
of \(\grave{a}\) is changed to a H because of the sandhi environment (preceding H or HL), is also possible.


[ \(\left.\right|^{-}\)\-]
'her rope'
An underlyingly low-toned noun root, in this environment, is realised with a high pitch, as seen in the following example. This seems to imply strongly that the pitch of the genitive marker is spreading over the whole word:


This analysis of tonal overwriting, such as has been attested in compounds, can be falsified by examining a possessed noun with a HL melody associated with the disyllabic noun root, however. We can see that two tone contours can exist on the same syntactic word. The same HL contour that was modified by tone sandhi in (27) to a simple H is allowed in (29) and (30), because the syllable that appears in the sandhi environment, the one immediately preceding the HL on nì and nè in (29) and (30) respectively, is a low tone, not a high tone.
(29)




[|\-\-]
'our village'

What are we to make of these data? Clearly the only viable solution is to assume that there are two phonological words within the one syntactic word. A mismatch between the phonological definition of word ('the environment of tone-spreading') and the syntactic definition ('a syntactically indivisible unit') is rare, but not unheard of, and has been reported for other languages (eg., within New Guinea Yimas, Foley 1991).
\(\mathrm{F}_{0}\) traces of the phrases hangling-pè=pe 'its (=her) roots', bàme-nè=ne 'our village', and \(\grave{a}\)-p \(\grave{e}=p e\) 'her rope' are given in the appendix.

\section*{9. The interaction of segmental and suprasegmental phonologies}

So far we have considered only the assignment of tonal melodies to the tone bearing units of a word, treating all syllables as phonologically equivalent. In fact, there are several restrictions associated with the assignment of suprasegmental phonological features to the segments. As an example of this we can cite the restriction against the vowel \(/ \# /\) appearing with contrastive nasalisation. When this nucleus is called for
 rather than the disallowed \(*[\) [ \(]\), is found.

Tonally the following two restrictions are found:
1. there is no contrast between high pitch and low pitch on syllables with voiced stop onsets. This reduces the number of contrasts found with \(b\) and \(j\)-initial syllables.
2. Falling pitch does not occur on syllables with an initial [+back] consonant or backing gesture; this bars falling pitch from occurring in syllables with \(k, j, w\) or \(y\) as their onset.
The first of these restrictions is phonetically-motivated: initial voiced stops show a lowered \(\mathrm{F}_{0}\) with respect to their voiceless equivalents, and so there is less acoustic space for the putative contrast between a high pitch and low pitch to be realised: the average frequency of the vowel in a syllable with an initial voiced stop would be lower than expected. The actual pitch on these syllables is between that of low pitched and high pitched syllables (judged based on the pitch heard when the syllable has a nasal onset or is vowel-initial). The hypothesis is that the reduced \(\mathrm{F}_{0}\) (at least at the onset of the vowel) associated with the high pitch has been reinterpreted as in fact showing no contrast with the typical (non-voiced consonant onset) \(\mathrm{F}_{0}\) patterns found on
phonologically low-pitched words (see figures 2 and 3 in appendix 1 for an example of how close the initial \(\mathrm{F}_{0}\) of high pitched and low pitched words can be). This has then led to a reinterpretation of syllables with this voicing preconditioning of the \(\mathrm{F}_{0}\) as in fact not displaying a phonological, and not just phonetic, contrast between a high and a low pitch. Since the main part of the vowel in these syllables is still greatly higher than in a phonologically low-pitched word, they are still interpreted as being phonologically high, and the phonologically low syllables, having been reinterpreted as not showing a distinction with the high-tone syllables, have been reanalysed as also being phonologically high tone.

A phonetic explanation for the absence of falling pitch on syllables with initial [+back] consonants is more complicated, but a plausible account can nevertheless be motivated. \({ }^{4}\) While there are few, if any, acoustic motivations for the restriction, we can formulate a plausible explanation in terms of articulatory gestures (after the manner of Erikson 1993). Firstly, we need to motivate the classification of the consonants in question as [+back]. While this may be obvious and uncontroversial for \(k\), and not particularly questionable for \(w\) ( \(\left[0^{w}\right]\) is an allophone of / \(w /\) following nasalised vowels), it is less immediately apparent why \(j\) and \(y\) should be characterised in this way. Again, the allophonic behaviour of these phonemes provides the justification that we need. The palatal stop \(j\) shows dissimilatory phenomena with following vowels. When a low, back vowel follows, the realisation is palatal, but with a high front vowel a more backed articulation is heard: thus \(j a\) 'noose trap for a pig' is heard as [戸e], but jíngpa 'fly (verb)' is [ \(\mathrm{g} j \mathrm{in}\) (mpa]. With \(y\) there is not velar allophone, but the typical pronunciation of this phoneme involves a complex gesture, especially when the following vowel is front (again a dissimilatory process). In these environments, we hear [deif ], [dzi], rather than [j]. While these are still not [+back] sounds, according to traditional feature assignments, they do involve a process of backing in their articulation: the muscles that are responsible for the raising of the tongue root in the articulation of [+back] sounds, such as velars and uvulars, are also involved in pulling the tongue root back from the alveolar or alveopalatal position towards the palatal, and thus the muscular gesture is the same, even though the target is quite different.

The [+back] articulation requires a muscular gesture in the sterno-hyoid muscle, which in turn would affect the muscle tension around the vocal cords. This would not restrict a specification for a falling pitch per se, but the higher \(F_{0}\) that would be induced by the greater muscle activity involved in the tongue body raising has evidently been enough to mean that the overall fall is not sufficient for the phonologically HL syllables to be interpreted as showing a HL pattern, and not simply a H melody pattern, combined with intonational fall. (Compare figures 2 and 4 in appendix 1 for an appreciation of how much \(\mathrm{F}_{0}\) drop is associated with a phonologically high pitched syllable in any event.) In this case, too, the inherent phonetic characteristics have been reinterpreted and reanalysed as phonological constraints.

\footnotetext{
4 I am particularly indebted to Donna Erikson and David Odden, amongst other participants at the Cross-linguistic Studies of Tonal Phenomena symposium in December 2002, for help in this analysis.
}

Evidence for the position that this is a productive rule, not a lexical or historical accident, is found in the lack of falling pitches on syllables with a [+back] onset. When marking the genitive, the 3SG.NF pronoun is heard with a high pitch: \(\left.k e^{-}[]^{-}\right]\), and not a falling pitch, as is found on the other genitives, such as 3SG.F pè [ \([\mid]\). This indicates that there is more than just a frequency restriction on the appearance of falling pitch on syllables with a [+high] consonant in the onset, and that there is a principled rule at work that excludes falling pitches from appearing on syllables with initial [+back] consonants.

The pitch contrasts that are found following different stops are shown in summary in table 6 . Note that, because \(/ \mathrm{j} /\) belongs to both the class of [+voice] consonants and is also a member of the set of [+back] consonants, it is doubly restricted in terms of which pitch contours are eligible to appear in syllables with it as onset.

Table 6. Pitch contrasts and syllable onset
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{2}{|l|}{\multirow[t]{2}{*}{}} & \multicolumn{4}{|c|}{Onset:} \\
\hline & & t, p, (rest) & \(b\) & j & \(\mathrm{k}, \mathrm{y}, \mathrm{w}\) \\
\hline high & [ \({ }^{-}\)] & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) \\
\hline low & [|-] & \(\checkmark\) & - & - & \(\sqrt{ }\) \\
\hline fall & [ 1 ] & \(\checkmark\) & \(\sqrt{ }\) & - & - \\
\hline
\end{tabular}

The examples in the previous section have already shown that where a falling pitch might be expected, a high pitch is realised on a consonant with a [+ high] consonant in the onset. This implies a rule of the sort seen in (31).


This is a clear indication that, while demonstrably best represented autosegmentally, tone melodies clearly make reference to features present on elements of the segmental tier as well.

We have discussed the restrictions on the assignment of tonal melodies to various syllables, but should note that, of course, the domain of tone in Skou is not the syllable, but the word. What, then, are the restrictions, if any, on the realisation of tonal melodies on whole words, when they have more than one syllable?

While there is no contrast between high and low pitch in syllables with voiced obstruent onsets (and so, in monosyllables, there is only a two-way contrast between high pitch and falling pitch), syllables with these onsets are found with low pitches when they are part of a polymorphemic word. The constraint dictating the absence of contrastively low-pitched syllables with voiced onsets, is relaxed in polysyllabic words.

The restriction still applies, however, in that it is impossible for a word with a voiced onset not to have a phonologically affiliated tone, one of H, LH, LHL or HL. But it is acceptable for a syllable with a voiced onset to appear with the low pitch associated with part of a complex tone melody. For example, in the compound balèng 'male' [|-1] the first syllable, with the voiced onset [ b\(]\), may appear with low pitch, because the whole compound appears with a LHL melody. Thus the restriction is in a phonological sense absolute, in that words with a voiced onset must be phonologically assigned a tone melody bearing a non-L toneme, but phonetically these onsets are able to appear with a low pitch.

The restriction against [+back] onsets appearing with falling tones is more relaxed, and appears to be purely phonetic. Words like kóko 'uncle (FyB, MyZH)', and wówo 'uncle (MB)' are both assigned a HL melody phonologically, even though in both cases the words consists solely of syllables with [+back] consonants. These morphemes are allowed because the restriction is a phonetic one more than it is a phonological one, and the phonetic constraint against falling pitch appearing contrastively on syllables with [+back] onsets is maintained, since the HL melody is spread over two syllables.

\section*{10. The place of Skou in a typology of tone}

What features distinguish the tonal system of Skou from other, better-known tone systems? The following points are the salient characteristics in the description of the Skou tonal system:
\begin{tabular}{ll} 
word-tone system & \begin{tabular}{l} 
the domain of tone assignment is the word, not the \\
syllable
\end{tabular} \\
common to Mende, Shanghai, etc. \\
accent & \begin{tabular}{l} 
in addition to a melody, there is a lexically assigned \\
point which attracts all the tonal units
\end{tabular} \\
similar to pitch-accent systems
\end{tabular}

In addition to these points of concurrence with more widely-reported features, we can note that there are two areas in where the Skou data suggests a major departure from most current models of tonology:
tonal root node not only not required for an analysis of Skou tonology, but expressly ruled out by the accentual data and the restrictions on its appearance
segmental interference while tone is clearly more adequately represented on an autosegmental tier, there is a lot more interaction
between the segments or a syllable and the pitch that is realised there than has been reported in languages outside New Guinea. \({ }^{5}\)

\section*{11. Summary of tonal processes in Skou}

The tonology of Skou is composed of the following units:
- five underlying melodies: H, L LH, LHL, HL, assigned at the word level;
- optional accent that pre-links tonal melodies to a particular syllable;
- restrictions apply to the LH and LHL melodies: they cannot link to a single syllable, and they bar the appearance of an accent;
- in compounds the right tone dominates, except that

L tone cannot overwrite another lexically affiliated tone in a compound, and
- morphological tone without segmental material of its own always overwrites lexical tone with associated segmental material
- tones associated with syllabic tone bearing units from right to left; phrasally, tonal spread also prefers rightward spreading over leftward spreading patterns

There are many issues remaining in the tonology of Skou. One of these, perhaps one of the most important, involves the lexical realisation of all of the tone melodies on monosyllables: to date no monosyllabic roots have been found that show evidence for a LH tone melody.

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\footnotetext{
5 Doug Marmion also reports significant segmental interaction with tone in Wutung, and Tida (2000) documents considerable interaction between segment and pitch in the Chimbu languages.
}

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\section*{Appendix 1: Illustrations of the contrasting pitch contours}

Words illustrating the different pitch patterns shown in tables 1 and 2 are given below. The arrangement of the table is identical to that of the earlier tables.

Table 7. Examples (in orthography) of words exemplifying the different pitch contours realising the tonal melodies for one, two and three syllables
\begin{tabular}{|c|c|c|c|}
\hline 1- \(\sigma\) & 2- \(\sigma\) & 3-б & \\
\hline pa 'house' & lengfi 'black' & lengbangbang 'sandfly' & H \\
\hline pa 'water' & nongpong 'four' & rangwaue 'axe' & L \\
\hline * & nake 'dog' & mabiri 'twenty four' & LH \\
\hline * & pangbi 'pig arrow' & kungpaue 'spider, octopus' & LHL \\
\hline \multirow[t]{3}{*}{pa 'complete'} & hengtong 'three' & kukufa 'quick' & HL \\
\hline & fungli 'scorpion' & apole 'gnemon, tulip' & H'L \\
\hline & hingtung 'two' & nahipa 'eight' & 'HL \\
\hline
\end{tabular}

An idea of the difference in \(\mathrm{F}_{0}\) that characterises the different monosyllabic constrasts can be gained by examining the following \(\mathrm{F}_{0}\) traces of representative utterances of the three words given above as examples of monosyllables, pá 'house', pa 'water' and pà 'complete'.

Figure 2. A token of pá 'house', showing phonological high pitch


Figure 3. A token of pa 'water', showing phonological low pitch


Figure 4. A token of pà 'complete', showing phonological falling pitch


The same lexical items (except that pà-HL 'complete' has been replaced with the homophone pà-HL 'cult house') are shown with the clitic =ing a 'the, because' attached, showing the effect of the same tone melody being realised over three syllables, [ paĩa].

Figure 5. A token of pá=ing \(a\) 'the house', showing phonological high pitch spread over three syllables


Figure 6. A token of pa=ing a 'the water', showing phonological low pitch spread over three syllables


Figure 7. A token of pà=ing \(a\) 'the cult house', showing phonological falling pitch spread over three syllables


The segmental phonology of Skou is summarised in the following chart:
Figure 8. The Skou segmental system
\begin{tabular}{llll}
p & t & & k \\
b & q & j \\
m & n & & \\
f & rl & y & w
\end{tabular}

\(\theta\)
h
a.
a.

\section*{Appendix 2. Monosyllabic tone contrasts in related languages}

The tonal systems of the other languages related to Skou, for which reliable data is available, are listed below as far as they apply to monosyllables.

Table 8. Monosyllabic pitch contrasts in Macro-Skou languages
\begin{tabular}{lcccccc}
\hline \hline & Leitre & Wutung & Rawo & Puare & Barupu & Sumo \\
\hline 'high' & 4553 & 55 & 55 & 55 & 55 & 55 \\
'low' & 22 & & 22 & 22 & 22 & 22 \\
\hline
\end{tabular}

Noteworthy is the fact that in Wutung and Leitre there is a predominance of functional contrast in the upper half of the pitch range; Wutung, for instance, is reported (Marmion p.c.) as having a high, two falls, and a rising tone, but no low tone, a typologically highly marked state of affairs.

The system of Puare, when examined in the light of polysyllabic words, also demonstrates a HLH melody, and we also find evidence for the same sort of accentual phenomenon present in the final two syllables that has been demonstrated for Skou, strenghthening the claim that these languages are related, since their phonological systems are extremely similar.

On this note, it is interesting to observe that the geographically separated Lakes Plains languages of the upper western Mamberamo, such as Kirikiri (Clouse and Clouse 1993) also show evidence for an analysis involving contrasting accentss in the final two syllables, and five tone melodies, H, L LH, HL and LHL. This, along with a scattering of cognate lexical items, might indicate a distant genetic relationship. So far there is insufficient evidence for a conclusive statement of relatedness between these two language groups.

\section*{Appendix 3. Fo traces for some examples of Skou tonal melodies realised across phrases}

The following traces show various aspects of some of the more complicated phonological processes involving the re-organisation and spread of tonal melodies across phrasal constituents in Skou.

Figure 9. Fundamental frequency trace for \(t e=\grave{e}=k o\) 'they cooked and later', showing the spread of the HL contour over the word


Figure 10. Fundamental frequency trace for \(n \grave{i}=e\), I go to the east', showing the HL of the proclitic \(n i\) spreading over both syllables, realised as a high pitch and a low pitch


Figure 11. \(\mathrm{F}_{0}\) traces for pá=ing \(a\) 'the house', showing a rise to the H target followed by a fall, and pà=ing a 'the cult house', which shows an even fall over the word


Figure 12. \(\mathrm{F}_{0}\) trace for te=pèng 'they leave', showing the spread of the HL contour over the entire word resulting in a stepped H and then L series of tones


Figure 13. \(\mathrm{F}_{0}\) trace for \(\grave{a}\)-pè=pe 'her rope', showing the realisation of a high pitch, rather than a falling pitch on the nominal root \(\grave{a}\), due to sandhi effects induced by the following HL on the genitive -pè


Figure 14. \(\mathrm{F}_{0}\) trace for hangling-pè=pe 'its (=her) roots', showing the spread of the HL contour associated with the genitive suffixes over the entire word


Figure 15. \(\mathrm{F}_{0}\) trace for bàme-nè=ne 'our village', showing the spread of the realisation of two independent HL contours in the one syntactic word
```


[^0]:    1 My sources for information on the languages other than Skou in the Humboldt Bay area are: Elseng: Burung 2002, own fieldnotes; Sentani: Cowan 1965, D. Hartzler 1976, M. Hartzler 1976, 1983, 1994, and pers. comm; Nafri: Gregerson and Hartzler 1987, own fieldnotes; Tobati: Donohue 2002; Ormu: Purba et al 1996; (Standard) Indonesian, Papuan Malay: own notes.
    2 Though see 7.2.2.1.

[^1]:    3 In Skou pa is 'water', and palong is a hole to the water; Enggros is found right at the narrow mouth of the bay, and Tobati further inside.

[^2]:    4 Niịkra / Nikra is a Papuan Malay term used in the north-eastern part of the province for the sorcerous people of the Pual valley (modern Ningera, Ossima, Osol, Ilol, Imbiyo, Bewani and outlying areas), and which is also applied to the Nyao people because of their sorcerous practices. Sangke is the name of one minor clan from Nyao, but one that had many dealings with the Skou villages.
    5 See texts 15 and 16 in Appendix 4 for Skou views on the Americans in the 1940s.

[^3]:    6 Despite the printed assurances of the Indonesian Department of Health.

[^4]:    7 This mobility continues to the present day, mediated only by the vagaries of border disputes between the two nations that hold land in this area.

[^5]:    8 Namely Sinitic, Miao-Yao, Mon, Tai-Kadai, Asli, Indo-European, and Bantu. Various of these are related to each other, and there are various claims for relationships with Austronesian, but they need not concern us here.
    9 There is some evidence for Skou having had an influence on the structure of nearby Austronesian languages, as reported in Donohue (2002e), and possibly there is an Austronesian source for the mixed kinship system found in Skou (see 9.9).
    10 Though Foley expressly notes that this is misrepresentative of the variety found in the nonAustronesian languages of New Guinea.

[^6]:    11 In the original, 'Wat het geslacht betreft worde hier aangetekend, dat het Sekou bij de substantiva en her persoonlijk voornaamwoord der 3e pers. sing. twee geslachten onderscheidt: mannelijk en vrouwelijk (natuurlijk èn grammatisch).'
    12 In the original, 'De taal onderscheidt zeker drie tonen, die zowel morphematische als semantische functies hebben.'
    13 In the original, 'sterk variëren van de wortel zelf'.

[^7]:    14 An example of this can be seen in Appendix 4, text 20 line 42; it is discussed in detail in 7.2.2 and 7.2.3..

[^8]:    15 Ross describes the language about which he wrote (1980) as being the Dumo dialect of the Vanimo language, acknowledging that there appear to be differences between the variety he describes and the Dúsir (here termed Dusur) variety that was described in outline in Laycock (1975). Some aspects of the phonology of the variety that Ross describes, however, notably the appearance of an $[\mathrm{h}]$ where Dumo normally has [ f ], suggest that he may have been dealing with a transitional variety of Dumo that has some characteristics of Dusur as well ( $\left[\mathrm{h}_{\mathrm{k}}\right]$ is found in Dusur, corresponding to Dumo [国; see Donohue 2002).

[^9]:    16 Ross lists $/ \mathrm{H} /$ as a phoneme of Dumo. This phoneme is found in Dusur, and not in Dumo, which has a $/ \mathbb{I} /$ corresponding to the Dusur $/ 5 / 5$.

[^10]:    17 See Reesink（1976）for another account of wordlist elicitation from the same informant in the same village with a twenty year separation in time between wordlists，and a $20 \%$ difference in the results obtained．

[^11]:    18 For instance, compare Leitre ne. 'mouth' with Dumo/Dusur lả, Skou là-z. See Donohue (2002b).

[^12]:    19 It is interesting to reflect on the neat arrangements that can be made from a closed system in a language, and to ponder to what extent they reflect language-internal organisation, or a linguist's striving for the 'neater' and 'more elegant' solution to a messy data set.

[^13]:    22 Parenthetically we can note that this restriction, combined with the observed restrictions on the data, would also argue strongly against the need for a tonal root node construct in a model of Skou tonology.
    23 Given tonal restrictions and restrictions on consonant and vowel cooccurrences, the total number of phonetically contrastive monosyllables is only 413.

[^14]:    25 There is one apparent exception to this apparent exception, the case of a low pitch marking past tense. This is discussed in section 2.3.1.9.

[^15]:    27 Phonotactic constraints were determined by combing through the existing lexicon of Skou, by attempting to elicit syllables with all of the 980 'logically possible' syllables types described above, and by seeing how Skou speakers reproduced these syllable types when I produced them. For instance, when asked to repeat back the syllable [bo] to me, speakers invariably produced [ bw ], and claimed that this is what I had produced. This shows that there is some psychological reality to the idea that voiced consonants are restricted to non-back or low vowel rimes only (2.5.3).

[^16]:    28 The lack of any proclitic agreement on $\hat{i}$ 'stand' in this sentence can be explained by the fact that it has an inanimate subject.

[^17]:    29 Assuming that a non-Papuanist does think about what a Papuan languages is like, they usually mention features of highlands Trans New Guinea languages, in my experience. See 1.5 for discussion.
    30 The high tone on the first dative morpheme marking yá 'sister' is present as a result of tone spreading from the high-toned root, yá, to the toneless suffix that is part of the same phonological word as it. The genitive suffix projects its own phonological word, and so realises its own tone pattern independently of the tone pattern of the nominal root to which it is syntactically bound (see 2.3.1).

[^18]:    [A Yá-né-nì=ne pe] ál $\quad$ pe=yúyú. sister-1SG.DAT-1SG.GEN=1SG.DAT 3SG.F.ERG father She:searching.for 'My sister is looking for father.'

[^19]:    31 The one major exception to this requirement involves inanimate and indefinite subjects, such as 'it rained', expressed in Skou as $F u$ ma rain rains. These same subjects do take proclitic agreement when the speaker wishes to emphasis the effects of the action, as in the following example:
    (i) $\mathrm{Fu} \quad *(k e=) m a \quad n i ̀ \quad k e=k a ́$.
    rain 3SG.NF=rain 1SG 3SG.NF=hit
    'The rain fell on me (soaking me in the process).'
    See 7.2.1.1 for more discussion.

[^20]:    32 The following example also shows an interesting case of disagreement, in that the vowel of the verb lóe 'get' does not appear in the plural form (roe instead of the expected $r i$ í). See 12.3.2.

[^21]:    50 Note the lack of high pitch on the first ne in [bápánenìne]. This reflects the fact that the root for 'friend' has an HL tone melody, which is realised as a high pitch on the first two syllables of the stem followed by a lower pitch on the pseudo-suffix -ne.

[^22]:    Ke=angku-nì=ne è-ke tà-nì=ne.
    3SG.NF=child-1SG.GEN=1SG.DAT wife-3SG.NF.GEN SW-1SG.GEN=1SG.DAT
    'My son's wife is my daughter in law.'

[^23]:    Naké lánghùe-pè=pe kóeng ke=ká.
    dog calf-3SG.F.GEN=3SG.F.DAT tooth 3SG.NF=hit
    'The dog bit her calf'

[^24]:    51 Most speakers I questioned denied that there was anything going on at all, and, even as they altered vowels from $[\sharp]$ to $[\underline{[u]}$ ] to show agreement, denied that any alternation was happening.

[^25]:    52 Gender and number can also be realised on the nominal predicate of a clause, but then only through the appearance of these categories within the NP that functions as the predicate, and so this is not a new locus for realisation.

[^26]:    53 Also, as situation calls for it, ne=ueme 'we women', e=ueme 'you women', using the 1PL and 2PL pronominal clitics respectively.

[^27]:    54 In the right circumstances the possessor of an object may also be indexed on the verb, showing external possession; see 9.5.2 for details of these constructions.

