THE ORIGINS OF SYNTAX IN DISCOURSE:
A CASE STUDY OF TOK PISIN RELATIVES

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The structure of relative clauses has attracted considerable attention in recent years, and a number of authors have carried out analyses of the syntax of relativization. In our investigation of syntactic structure and change in New Guinea Tok Pisin, we find that the basic processes involved in relativization have much broader discourse functions, and that relativization is only a special instance of the application of general ‘bracketing’ devices used in the organization of information. Syntactic structure, in this case, can be understood as a component of, and derivative from, discourse structure.*

We begin in §§1–3 with a discussion of strictly syntactic issues: the processes used in the formation of Tok Pisin relative clauses and cleft sentences. In §4, we broaden the analysis to show how the ‘relativizing’ particle is used in deixis. In §5, we examine a number of discourse considerations, including problems of sequencing. We then attempt to show, in §§6–8, how a discourse-based analysis provides a means of understanding exceptions to the purely syntactic formulation. Finally, we indicate how our approach enables us to reconstruct a plausible sequence for the origin and spread of the relativization transformation, and address ourselves to the issues of syntactic complexity in a creolizing language.

1. RELATIVE CLAUSES. The prototypical relative-clause construction, as found in the cases we have studied, is illustrated in sentences 1–8, all of which share the

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1 This study is based largely on a series of recordings of Tok Pisin made in the town of Lae, Papua New Guinea, in July and August 1971 by Suzanne Laberge and Gillian Sankoff, though a few of the sentences analysed date from Sankoff’s earlier work in the Buang area. We thank the many kind people who agreed to recording of conversations among themselves and their children. We also thank Colonel John Harrington of the Pacific Islands Regiment, who facilitated contacts with residents of Igam Barracks where a number of the recordings were made, and Suzanne Laberge, whose help throughout the study was invaluable.

Though the recordings were made in Lae and surrounding areas of the Morobe District, it would be inaccurate to suppose that the Tok Pisin of the people recorded represents only a ‘Morobe District dialect’ of the language. The adults we recorded were from all parts of Papua New Guinea, were for the most part married to people with whom they did not share a tok ples (native language), and had lived in other urban centers besides Lae. Of the 18 adults whose utterances we analyse here, nine were from various parts of the Morobe District, five were from the Highlands, two were from Bougainville, one was from Madang, and one from West New Britain. Most of the children (eight of whom figure in this analysis) had also lived in towns other than Lae. All the people quoted in this paper are referred to by pseudonyms.
fact that the embedded relative is bracketed off from the matrix sentence by the particle ia. The left-hand (or initial) ia occurs immediately after the head noun, and the right-hand (or terminal) ia occurs at the end of the embedded clause. In addition, these sentences demonstrate the flexibility of the ia-bracketing of relative clauses. First, the head noun modified by the ia-bracketed relative can occupy the three basic syntactic positions in the matrix sentence: subject (as in 1–4), complement (as in 5–7), and circumstantial or oblique (as in 8):

1. MERI ia, [EM i yangpela meri, draipela meri ia], EM harim istap (Donald D.) ‘This GIRL, [WHO was a young girl, big girl], was listening.’
2. Disfela liklik BOI ia, [tupela kisim EM ikam ia], EM, EM ilai kigo huk (Elena F.) ‘This little BOY, [THAT the two of them had brought], was going to go fishing.’
3. Na PIK ia [ol iklim bipo ia] bai ikamap osem draipela ston (Elena Z.) ‘And this PIG [they had killed before] would turn into a huge stone.’
4. Dispela MAN ia, [lek bilong EN idai ia], EM istap insait nau (Diane G.) ‘This MAN, [WHOSE leg was injured], stayed inside.’
5. E, yupela lukim MERI ia [bipo EM istap ia]? (Noemi S.) ‘Hey, did you see the WOMAN [WHO used to live there]?’
6. Em yupela lukim MERI ia [bipo i go istap ia]? (Noemi S.) ‘Did you see the WOMAN [WHO used to live there]?’
7. Mama iputim DISFELA ia, [igat kon na muruk samting istap ia], em iputim i go (Emma M.) ‘Mother put THIS ONE, [WHICH has corn and cassowaries on IT], she put IT down.’
8. Olosem mipela tu ia save kros nabaut long GIRAUN ia [gavman isave kisim ia] (Tony T.) ‘Us too, we’re pretty angry about the LAND [the government has taken].’

Note also that, in contrast to Malagasy and other Western Austronesian languages discussed by Keenan 1972, the coreferential NP can also occupy these three positions within the embedded sentence: subject, as in 1, 5, 6, and 7; complement, as in 2, 3, and 8; and oblique, as in 4 and 7.

\[2\] We are well aware that non-restrictive relative clauses at least, and possibly also restrictive relative clauses, may be analysed otherwise than as sentences embedded into NPs; thus Thompson (1971:94) proposes that ‘both restrictive and non-restrictive relative clauses must be derived from underlying conjunctions.’ In attempting to situate our understanding of relative clauses in a discourse framework, we take no particular stand on the transformational issues involved (cf. also fn. 24 below); we use the term ‘embedded’ temporarily (it will later be replaced by the term ‘parenthetical expression’) and in the most general sense, corresponding to Benveniste’s discussion of the relative in Ewe as a ‘phrase ... encadrée’ (1957:40; the translator has rendered this in English as the ‘framed’ clause, 1971:182). For another discourse-based analysis of relatives, cf. Loetscher 1973.

\[3\] Unless otherwise indicated, the head noun, and any other representation of it in the sentence, will be in large capitals both in Tok Pisin and in the English gloss; ia, used as a bracketing or embedding marker, is printed in boldface.

\[4\] ‘There’ in the English glosses of 5–6 conveys part of the meaning of the verb istap ‘to live, stay (somewhere)’, which can be used without mentioning a place; it is not a gloss for ia.

\[5\] This can be explained by categorizing Tok Pisin in Keenan’s terms as ‘noun coding’ (as opposed to verb coding). This is consistent with the fact that the means used ‘to indicate the
Another aspect of flexibility in ia-bracketed relatives is the way that the coreferential NP is represented within the embedded relative clause. It appears never to be simply copied as a noun, though sometimes it is represented by a pronoun. In 1, e.g., meri ‘girl’ is represented by the pronoun em ‘she’ in the embedded sentence. Similarly, boi ‘boy’ in 2 is pronominalized to em ‘he’, and in 5 meri again becomes em. In 4, man ‘man’ is pronominalized to en ‘he’. In the other four sentences, however, the head NP has no surface representation in the relative clause. Thus there is an alternation between pronominalization and deletion of the coreferential NP within the embedded sentence. This alternation occurs in virtually identical syntactic environments. Comparing sentences 2 and 3, e.g., we see that each begins with a subject noun (boi and pik ‘pig’ respectively); then follows an embedding in which something was done to the boy (or the pig)—i.e., each is the complement in the embedded sentence; finally, comes the predicate of the matrix sentence. In 2 however, boi is pronominalized to em in the embedded sentence, whereas in 3, pik has no surface representation at all in the embedded sentence. Sentences 5–6 present an even closer parallel. Said by the same speaker, only several minutes apart, and recounting two successive episodes in which two different groups of people were asked the same question, the sentences are virtually identical (in both cases meri is the complement of the matrix sentence and the subject of the embedded sentence)—except that in 5, meri is pronominalized to em in the embedded sentence, whereas in 6, it has been deleted altogether.

Exactly what constrains the alternation between pronominalization and deletion of the coreferential NP in the embedded sentence is not entirely clear. There are, however, several constraints about which we can be sure. First, when the head NP consists of a personal pronoun, deletion always seems to apply within the relative clause. There are, however, very few such sentences; in most, as in 1–8, the head NP consists of a noun, or a noun plus an adjective or a demonstrative like dispela ‘this’. Hence this generalization is not very helpful in accounting for the variation we observe. A second constraint deals with the syntactic position of the coreferential NP within the embedded sentence. This has three parts, as follows:

(a) In OBLIQUE cases (after the ‘prepositions’ long and bilong), the relativized NP always appears as a pronoun, and is never deleted. An example of this with bilong (possessive) is provided in 4 above, where a more literal gloss of the embedded sentence would be ‘the leg of his was injured’. An example with long (generalized locative, ‘at, on, to’) is:

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role (subject, object etc.) of the head NP in the subordinate clause’ (171) include both pronominalization (though as we shall see, this is highly variable) and word order. Though case-marking is typical of noun coding languages, Tok Pisin (like most pidgins and, of course, many other languages) demonstrates almost no case-marking. Interestingly, however, one place where it does show up is precisely in the marking of oblique cases, where em (3rd person pronoun, unmarked for gender, and used everywhere except in oblique cases) becomes en after long and bilong.

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6 One such sentence is cited as 67 below.

7 Though both long and bilong can be loosely said to function as prepositions, both have wider syntactic functions, including that of subordinators: bilong as an introducer of purpose clauses; long as a complementizer. For more details cf. Mühlhäusler 1975, Laycock 1970a, Wurm 1971.
(9) *Yu lukim DISPELA ia [kon ia wantaim muruk isanap long EN ia]?*  
(Emma M.) ‘Did you see THIS ONE [THAT has corn and cassowaries on IT]?’

Since prepositions cannot be stranded, there is no analog to the English ‘Did you see the one that they put the design on?’

(b) In cases of COMPLEMENTS, the relativized NP very rarely appears as a pronoun, but is almost always deleted (in a ratio of about 4:1), as in 3 above. But there are a few cases where, as in 2, complements remain as pronouns in embedded relative clauses. In any case, there is a general rule which deletes complements of transitive verbs in a great many contexts (cf. Lathey 1975). Thus the fact that very few accusative pronouns show up in relatives is not chiefly the result of any rule specific to relativization.9

(c) It is where the coreferential NP occurs as the SUBJECT of the embedded sentence that we find the greatest variation. Here, too, the tendency is to delete rather than pronominalize, but in a ratio of only about 2:1.

The Tok Pisin sentences thus represent two of the syntactic variants sketched by Schwartz 1971, namely his types (ii) and (iii), schematized (p. 142) as follows:

(ii) N *that*$_S$ [... $\emptyset$ ...]

(iii) N *that*$_S$ [... PRO ...]

Noting that the element represented as *that* ‘is not case-inflected and cannot be the object of a preposition’, Schwartz adds: ‘Type (iii) is only a variant of (ii), in that (iii) allows the accusative pronoun to surface, although it may be optionally suppressed. Both types allow the more oblique cases to be relativizable as surface pronouns, e.g. *the house that we live in-it.*’ As we have shown above, Tok Pisin also allows the subject pronoun to surface, a possibility not discussed by Schwartz. Indeed, surface subject pronouns are more common in relative clauses than accusative pronouns.9 Surface pronouns are obligatory in oblique cases.

Where there is a surface pronoun in the embedded sentence, there appear to be no movement rules which would re-order constituents differently from their normal order in non-subordinate sentences. Thus there is no evidence of a rule which would demonstrate a principle of pronoun attraction (cf. Givón 1972); and we have only one sentence (13 below) which might serve as a possible candidate for pied-piping (Ross 1967: 114)—an attempt which failed, as the speaker hesitated and reverted to normal order.

Another area of variation in the structuring of embedded relative clauses involves those cases in which the matrix sentence continues after the embedding. Since

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8 Nor do any semantic features such as [+ animate] or [+ human] appear to have a role in constraining the deletion of accusative pronouns.

9 The fact that it is predominantly subject pronouns which ‘surface’ has prompted Susan Steele (personal communication) to raise the question of whether there is normally a pronoun copy or clitic in simplex sentences of the form *Tispeia SKIN EM i bilong kapul* (Laycock 1970a: 24) ‘This skin is a possum skin.’ Indeed, there are many such sentences; but there are also many sentences of the form *Tispeia BANIS i bilong gaten bilong mi* (Laycock 1970a: 25) ‘This fence belongs to my garden.’ We find such pairs in equational sentences as well as in sentences with various verb types (cf. also the contrast between 52 and 53 below); and the constraints on pronoun copying in simplex sentences are at present far from obvious.
Tok Pisin is an SVO language, these sentences are, for the most part, those in which the head noun is the subject of the matrix sentence—as in 1–4 above, where the embedded relative is followed at least by the verb of the matrix sentence. Of the 49 such sentences in our corpus, 33 (67%) are like 1, 2, and 4, in that the coreferential NP is again represented after the embedding, as a pronoun. ‘Literal’ glosses for these sentences would be as follows:

(1') ‘This girl [who ... ...] she was listening.’
(2') ‘This little boy [that ... ...] he was going to go fishing.’
(4') ‘This man [whose ... ...] he stayed inside.’

In 3, however, the speaker does not repeat the pronoun after the embedding, and the initial English gloss given above respects its absence.

Thus there are four possibilities with respect to the surface representation of the coreferential NP, in sentences where the matrix and embedded sentences do not finish coterminously. First, the head noun, occurring prior to the embedding, can be pronominalized both within the embedding and again after it. Thus in ex. 1 we have:

\[ \text{meri ia [em ... ia] em ...} \]
\[ \text{girl [she ... ] she ...} \]

There are fourteen such sentences in our corpus. Sentence 3 is the complete opposite of this, the head noun being unrepresented on the surface both within the embedding and after it. We have fourteen examples of this type. A third possibility is Equi-NP Deletion within the embedding, coupled with pronominalization after it, as in the following (one of nineteen such sentences):

(10) \[ \text{BOI ia [igat fiftin yias ia] EM itokim ologeta liklik boi ol ikam} \] (Elena F.)

‘This BOY [WHO was fifteen years old] HE told all the little boys to come.’

The last possible combination consists of a pronoun in the embedding, with no pronoun after it. This seems to be very rare; we have found only two such cases:

(11) \[ \text{Disfela MERI [EM pas tru, EM isave tru ia], o.k. bai kisim setifiet na igo} \]
\[ \text{nes} \] (Elena F.) ‘Any GIRL [WHO really succeeds, WHO really knows],
\[ \text{will get a certificate and become a nurse.} \]

(12) \[ \text{Na, ol long Moresby tok, 'Em, MASTA [EM igo long ples ia] ikam long} \]
\[ \text{wok ia.'} \] (Amanda Z.) ‘And, the people in Moresby said, “The WHITE MAN [WHO went to the village] has come to work here.”’

Both sentences lack the initial ia-bracket, and 11 is also interpretable as a conditional, glossed something like: ‘If a girl really succeeds, really knows, she’ll get a certificate and become a nurse.’ Both of these matters will be discussed in §8 below, where we shall see that the alternation between deletion and pronominalization of coreferential NP’s is also related to aspects of the information structure of the discourse.

In summary, we have seen that the basic process used in relativization is the placement of ia at the beginning and end of the embedded clause, and that this device is used independently of whether head nouns and coreferential NP’s are in subject, complement, or oblique positions. Within the embedded clause, the
relativized NP may either be represented as a pronoun or deleted, and there are some syntactic constraints involved in this variation. Where the matrix sentence continues after the embedding, the head noun tends once more to be represented as a pronoun; but again it is often deleted, and there is a great deal of variation here too. Where Equi-NP Deletion has occurred within the embedding, a coreferential pronoun is slightly more likely to occur again after it than not (19 occurrences and 14 non-occurrences). The presence of such a pronoun within the embedding, however, makes it very likely that another will also occur after the embedding (14 occurrences vs. 2 non-occurrences).

2. OTHER POSSIBLE DEVICES FOR RELATIVIZATION. We shall now consider whether all relative clauses in Tok Pisin are constructed in this way, and whether any other mechanisms are used in relativization. Indeed, not all relative clauses are bracketed on both sides by *ia*—as we have already seen in 11–12, where *ia* marks only the end of the embedded relative. In other cases, *ia* marks only the beginning of the embedding; and in still others, *ia*-brackets are missing entirely. An attempt to describe and explain these phenomena will, however, have to await a discussion of the broader functions of *ia*-bracketing in discourse.

As far as other markers of relativization are concerned, it is important to note the role of intonation. Many embedded relatives end on a rising intonation contour, as will be examined in greater detail in §5.

Another possible type of marker is WH-forms—a set of obvious candidates for relativizers in any language, given the relation between relatives and indirect questions as discussed, e.g., in an important paper by Keenan & Hull 1973. In Tok Pisin, these are *we* ‘where’, *husat* ‘who’, and *wonem* ‘what’. In all the complex sentences we have examined, only five use WH. In 13, there is hesitation as the speaker first tries long, then we, and then finishes off the relative with a right-hand *ia*-bracket:

(13) Nau bihain nau, em igo soim PLES [long, we pik isave slip long en ia] (Elena Z.) ‘And so then, she went and pointed out the PLACE, [at (to), where the pig slept].’

Sentence 14 is an indirect question:

(14) Nating tumara santom mi mas go bek long ples bilong mitupela ia na lukim [husat kilim dispela pik na tromoe] (Elena Z.) ‘Maybe tomorrow or so I should go back home and see [who killed this pig and threw it away].’

In 15, *wonem* in fact modifies the head noun in the matrix sentence, rather than serving as a relativizer:

10 Had *long* not been replaced by *we* in this sentence, it would probably have been followed by the pronoun *en* (given the impossibility of preposition stranding), yielding something like ‘at it the pig slept’. But this possible attempt at pied piping seems to have failed, in that the speaker replaced *long* by *we*, and then inserted *long en* (‘at it’) in its normal, postverbal position. However, since *long* also serves as a complementizer, its use here (and in 17, below) may have been as an intended subordinator rather than a preposition. Both sentences involve considerable hesitation on the speaker’s part. A third possibility is that *long* represents an aborted attempt to introduce an indirect object: *soim ples long X* ‘pointed out the place to X’.
(15) *Na wonem MASTA [em ilaik kam long ples bilong en] tasol em pas long Pidgin tasol (Emma M.) 'And whatever (any) WHITE MAN [(who) comes from his own country] must simply learn Pidgin.'

Sentence 16 is the only one of its kind in our corpus, in that the relative is preposed with respect to the entire matrix sentence—its head, *ol*, being the last word in the matrix sentence:

(16) [Husat igat mani paul na istap long buk bilong mi yet], orait mi gat plantesin kopi, mi ken bekim dinau bilong OL (Samuel K.) '[Whoever has money gone astray and it’s registered in my book], well, I have a coffee plantation, I can repay the debt to THEM.'

Had the relative not been preposed, the speaker would not have used a construction like *(dinau bilong OL [husat igat ...]) 'the debt of THOSE [who have ... ]' At any rate, our material yields no such sentences, and we have no hesitation in marking such a sentence as at least questionably grammatical. Lastly, 17 uses a WH-form (*husat*) as well as double *ia*-brackets, and it is doubtful that *husat* is really functioning as an embedding marker. Rather, it is probably a hesitation form used while the speaker searches for the lexical item *ol man* 'the people' (as described in §4):

(17) *Em tokim tupela stori long PIK ia [husat ia, EM ol man, long ol man ronewe iigo ia] (Elena Z.) 'She told the two of them the story of the PIG [who, uh, the people, that the people ran away from].'

The paucity of sentences in our corpus using various forms of WH in the syntax of complex sentences does not, however, indicate the absence of such constructions in Tok Pisin. Indeed, in the Manus District, Peter Mühlhäuser (personal communication) has heard *we* used as a relativizer in sentences other than relatives of place. Nevertheless, in the Tok Pisin familiar to us, the only common use of WH in complex syntax is in indirect questions such as 14. Though we do not treat indirect questions in this paper, our general impression is that *ia*-bracketing is not used in these constructions, and that WH is widely used. Cleft sentences, however, group with the relatives in using *ia*-bracketing, and we will turn briefly to a consideration of them.

3. CLEFT SENTENCES. Keenan & Hull’s study of relative clauses, cleft sentences, and WH-questions in approximately a dozen languages sets forth a number of reasons why the syntax of the three constructions should present so many similarities. In addition, they find ‘a general tendency, on points where all three construc-

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11 In our data, we is not used even in the formation of place relatives, the only case we have being 13. Mühlhäuser (personal communication) reports that his data for *those speakers who use we as a relative pronoun suggest that left-hand *ya* never appears but that right-hand *ya* is occasionally present.' Nevertheless, *‘ya* is strongly present in the speech of young people on the New Guinea mainland, particularly strong in the case of those who speak Tok Pisin as their first language.' Mühlhäuser also cites data gathered by Malcolm Ross in a high-school class of students from various parts of Papua New Guinea, for whom *ia* was consistently used in forming relative clauses: 'The left-hand *ia* was consistently present, the right-hand one sometimes missing when it fell at the end of a sentence.' Camden (1975) states that in contemporary Bislama (Beach-La-Mar), a sister language of Tok Pisin spoken in the New Hebrides, *we* is used as a *‘dependent clause marker’*. The examples he cites use *ya* postponed to the head noun, followed by *we*. 
tions are not similar, for WhQ and Cleft to pattern similarly, both differing from RelCl’ (350). In the Tok Pisin we studied, however, it is relatives and cleft sentences which use a parallel construction, both differing from wh-questions (direct and indirect). Several examples of cleft sentences are:

(18) Em liklik barata ia [mi tok ia] (Noemi S.) ‘It’s the YOUNGER brother [I’m talking about].’
(19) Nogat, em wantok ia [putim long maunten ia] na nau tasol senesim givim mi (Tim D.) ‘No, it was my FRIEND [who was wearing (it) on the mountain] and only now did he trade it with me.’
(20) Em nambawan meri ia [igat nain bilong en [bai igo long Lae]] (Sarah D.) ‘It’s the FIRST wife [who has the right [who will go to Lae]].’
(21) Em wanpela America ia [iputim nain long en] (Emma M.) ‘It was an American [who gave her name to her].’

In 18–20, the emphasized word in the English gloss indicates that this is the focused element, being distinguished from some other possible referent. In 18–19 the speaker wants to correct an erroneous identification of the person being talked about by the previous speaker. In 20, which contains two embeddings, nambawan meri ‘the first wife’ is focused on in contrast to another woman who erroneously thinks she will be able to go to Lae. Sentence 21 looks parallel to the other three; i.e., it seems to focus on a particular referent which satisfies (in Keenan & Hull’s terms) ‘the condition given by [the sentence] separated off from it. Further [such sentences] all presuppose that some member of the world satisfies this condition.’ We shall see later, however, that 21 does not quite correspond to this view, and an examination of it in its discourse context will help us sharpen our analysis of concepts like ‘focusing’ and ‘presupposition’.

Note that there is no surface copula in any of these sentences, not even the ‘predicate marker’ i- (which would indeed be the only possible surface marking). Nevertheless, i- can be deleted in a large number of environments (cf. Smeall 1975, Woolford 1975); and we would argue that initial em in 18–21 is serving as the dummy ‘it’ in what are, semantically, clearly cleft sentences. A semantic criterion is, incidentally, also used by Keenan & Hull, where cleft is identified as a construction which ‘can be negated to mean that there is something or someone satisfying the sentence, but not the one referred to by the construction’ (370). This is the case for all the sentences identified as cleft in this study.

One last point to note about 18–21 is that not all of them show complete ia-bracketing. Specifically, 20–21 do not terminate the embedded sentence with ia. For these cases (as for 11–12 in which initial ia was missing), we shall examine the constraints on the placement of ia in §§6 and 8.

4. ia in DEIXIS. In grammatical descriptions of Tok Pisin that we have consulted, ia has been treated as a place adverbial (Laycock 1970a:xxviii)—and, when co-occurring with tispeia (dispeia) or em, as a demonstrative (Mihalic 1971:16, 22; Wurm 1971:12). Etymologically, it is derived from English here (Mihalic 1971:98),

12 Pawley points out that *ia is the reconstructed form of the 3sg. focal pronoun for Eastern Oceanic (the Austronesian languages of island Melanesia other than New Guinea), and that it occurs in many currently spoken Eastern Oceanic languages. It does not, however, appear to
and the sources spell it *hia*. An example of its use as an adverb of place is 22, and two examples of its use as a demonstrative are 23-24:

(22) *Yu stap hia* (Mihalic 1957:46) 'Stay here.'
(23) *Em hia* (Mihalic 1957:46) 'This one here.'
(24) *Tispela haus hia* (Wurm, 12) 'This house.'

Though our data show very little use of *ia* as an adverb of place, they do confirm that this function (probably the original one, given a transfer of the English meaning of 'here') still exists to some limited extent. (The final *ia* in 12 above is interpretable in this way). *Long ia* (literally 'at here') is sometimes heard; but *ia* is more frequently used to modify other expressions in place deixis, so that a more likely gloss for 'here' would be *plies ia* or *hap ia*.

But it is as a demonstrative or deictic marker that *ia* abounds in our data. It seems only a short step to extend the function of a lexical item that has served as an adverb of place to a demonstrative or generalized deictic function. At least, this is a phenomenon common to many languages; cf. Eng. *this here man*, which retains a non-standard connotation, or Fr. *celui-ci* and *celui-là* ('this one' and 'that one' in standard French, from the adverbs *ici* and *là* respectively). We should point out that, although the argument in this paragraph assumes a 'place adverbial' origin, with an extension to broader demonstrative or deictic functions (an argument which appears to have historical support in this case, as we shall demonstrate in §9), the fact that the two functions are expressed by the same form on the synchronic level, in Tok Pisin as in many other languages, is understandable in terms of the close semantic analogy between the two uses, without assuming any directionality.

We have many sentences in our data like 23–24, in which *ia* is postposed to a noun or pronoun and has the function of focusing on that element. Sometimes it marks contrast with some other referent—'this (here) N,13 rather than some other'; but sometimes it simply foregrounds the N. In 25, e.g., the speaker is

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13 *ja* almost always attaches to some nominal element, symbolized here by N. There is one class of uses of *ia*, however, with which we do not deal here: cases where *ia* attaches to verbal expressions or to whole sentences. Here the function could again be described as one of focusing or emphasis, as in the ubiquitous, emphatic *Nogat ia!* 'No sir!', alternating with *Nogat tru* as a stronger form than simply *nogat* 'no'. Two other examples of this verbal-qualifying, or 'sentence-bracketing' use of *ia* are:

*Ya, Susanna, yu no kaikai ia!* (Lalia T.)
'Hey, Susanna, you didn't eat anything at all!'

*Tasol narapela narapela osem, ino inap ia!* (Emma M.)
'But all sorts of other people, they're simply incapable of it!' (of speaking Tok Pisin well, in contrast to the speaker and her friends).
asking a friend of hers about the price of a certain type of cloth the friend has bought. She says to her, pointing to the cloth in question,

(25) *Disfela ia, ol ikosim em haumas?* (Lita T.) ‘This one, how much do they charge for it?’

*ia* in deixis is sometimes best glossed as ‘this’ or ‘that’ (cf. Rickford 1973:17), sometimes as the weaker ‘the’. But note that the distribution of *ia* (alternating with *∅*) probably does not correspond in any neat way with the distribution of *this*, *the*, and *a* in English, certainly not with respect to the complexities of colloquial usage exemplified in sentences such as *So we ran into this friend of hers*. (Indeed, it will soon become apparent that the sentence is a very inappropriate unit for the analysis and understanding of these issues, and can therefore exemplify very little.) Like Eng. *this*, however, *ia* can be attached either to a *FIRST* reference to a particular item in some discourse, or to a *LATER* reference to an item which has previously been mentioned. What is common to both cases is that, in saying *N ia 'THIS* one’, the speaker uses a form that invites the addressee to recognize or uniquely identify the referent. Such recognition or identification may be accomplished in several ways. First, there may be a gestural or non-linguistic accompaniment to the speech act itself, occurring at the same time or in close proximity to it, which makes very clear the referent of the word to which *ia* has been attached—e.g., Lita’s pointing to the cloth in 25. Another case would be someone’s asking, immediately after a very loud noise has visibly startled everyone present, *Em wonem ia?* ‘What was that?’, where ‘that’ clearly refers to the noise—or an even more laconic *Balus ia*, literally, ‘This/That airplane’, but understood by everyone under the circumstances to mean ‘This/That noise was caused by an airplane.’

Second, the attaching of *ia* to some *N* (in the absence of concurrent non-linguistic indication of the referent of *N*) may in itself be sufficient for the identification of its specific referent. This may be either because the referent has been specified earlier in the discourse (in the case of later references), or because of information shared by speakers and hearers prior to this interchange (in the case of first references). In both cases, talking about speakers and hearers ‘accomplishing’ identification may seem to be putting the case somewhat strongly. Nevertheless, the issues here clearly deal with identification, whether or not there is any problem about the actual task of identification which a particular speaker or hearer has in a given case. For example, 26 is drawn from a long narrative about a whole community of people from a seaside village fleeing to the hills in fear of a tidal wave, expected to follow an earthquake foretold by a prophet:

(26) *Na ol igo istap long MAUNten ia na wet long bikpela GURIA ia igo* (Noemi S.) ‘And they went and stayed on this MOUNTAIN and waited for this big EARTHQUAKE.’

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14 Rickford also points out that *ia* can mean ‘both “this one here” and “that one there” or both “the former” and “the latter”.’ We thank him also for helpful discussion of many of the problems of deictic *ia*.

15 Our use of the term ‘identification’ corresponds rather closely to Sacks & Schegloff’s (MS) use of ‘recognition’; i.e., the issues involve recognition of a specific, known referent. It is also very similar to the use of ‘attrition’ in Goffman (MS), which involves recognizing which specific one of a known set is being referred to, where the referent refers hearers back to some schema of identification they are known (or believed) to have.
The mountain (maunten) in question and the impending earthquake (guria) have already been discussed in some detail by the narrator; references to them here are subsequent references. There is no problem in distinguishing this particular mountain and earthquake from some other possible candidates. In specifying maunten ia and guria ia, the narrator is alerting the listener to the fact that she has already been told 'which mountain' and 'which earthquake'. Another example is taken from a narrative where the protagonists are two women, the meri tru ‘real woman’ and the tevel meri ‘spirit woman’. The sentence starts by twice referring to them jointly with the dual pronoun tupela; the next reference is to only one of them, the meri tru, which is qualified by ia and refers back to a prior characterization:

(27) TUPELA igo, igo kisim kanu na TUPELA igo, igo igo nau, na MERI TRU ia em iwo—huk. EM ivok long pulim pis na tevel meri ivok long kaikai pis (John P.) ‘The two of them went and got a canoe and the two of them went off, and the REAL WOMAN was—fishing. SHE was busy fishing and the spirit woman was busy eating the fish.’

The problem of identification appears fairly simple in narratives, where an item tagged with ia has generally been introduced and characterized earlier, as with maunten, guria, and meri tru in 26–27. In hundreds of cases like these, neither speakers nor hearers appear to encounter any problem in achieving mutual understanding of the correct referents of N’s to which ia’s are attached. Indeed, speakers and hearers seem able to communicate correct identifications in many potentially more difficult situations than those of 26–27, e.g. where the N in question has not previously been mentioned, as in 28. Here the speaker has been engaged in an abstract discussion of the nature of a type of spirit creature known as masalai ‘incubus’. ‘A masalai can turn itself into human form,’ he has been explaining, ‘in order to seduce you. You may just sit down and have a chat with it, thinking it’s a real person. But it’s invisible to everyone else; only you can see it. So if I were to come along and find you talking to one, I wouldn’t be able to see it, and I’d exclaim:

(28) E! MAN ia toktok wantaim husat?!’ (Tony T.) ‘Hey! Who’s this GUY talking to?!’

Man ia is clearly the person who has up to now been referred to as ‘you’, the hypothetical character the masalai has been trying to seduce; and Tony’s exclamation is addressed to some hypothetical third party. Though man in 28 was technically being used for the first time in the discourse in question, the identification of its referent was not problematic for any of the hearers.

Despite the fact that no problems of identification in fact occurred in 25–28, it is nevertheless the case that saying N ia ‘THIS N’ opens the door to the potential ‘identificational’ query, ‘Which N?’16 Though on many occasions speakers in

16 Various observers have differed in their interpretations of just how problematic the identification of the N qualified by ia is. Thus Wurm states (12): ‘Hia and lohap ... are also used alone after nouns ... This is done when the object referred to has been mentioned before, or the person spoken to is familiar with it, or no doubt is expected to arise over what it is. The use of these postposed demonstratives carries the connotation of stressing the obvious, and the purely demonstrative function is sometimes quite weak, e.g. mi hanggiri long mit hia: I am hungry for tinned meat (i.e. it should be obvious that I do not hunger for sweet potatoes.’ Rickford, on the other hand, says (3): ‘Ia seems to be used in just those cases where doubt
no way acknowledge such potential problems, we have several kinds of evidence that achieving identification can be problematic; all these involve cases in which speakers say N ia, but do not simply continue on with the sentence or discourse. The first kind of evidence comes from sentences where the speaker uses the slot opened up by ia after N to insert further information relevant to the identification of the referent of N. In 29, e.g., the speaker is telling a story about three brothers, the last of whom was called Dusty. Since he was mentioned, however, an episode has occurred in which an old man came walking along the road and broke his leg, an episode which takes several sentences to recount and ends with the beginning of the cited material. The next reference to Dusty first uses the term dispela boi ia ‘this boy’, but then the slot immediately after ia is used to insert his name, Dusty. Renaming appears to be one excellent way of assuring appropriate identification:

(29) ... na kar ikam na, brukim lek bilong en. Brukim lek bilong en na, dispela BOI ia, DASTI ia, lukim ... (Celia D.) ‘... and the car came and, broke his (the old man’s) leg. Broke his leg and, this BOY, this DUSTY, saw ...’

Another one-word re-identification is illustrated in 30. Here it consists not of a proper name, but of the term which has previously been used throughout the particular discourse to identify this referent, i.e. masalai:

(30) O, mi toktok wantaim TAMBERAN MAN ia, MASALAI (Lalia T.) ‘Oh, I was talking with this SPIRIT, this INCUBUS.’

Whereas 29–30 illustrate one-word renamings of the referents of the first N (boi and tamberan man, respectively) for purposes of identification, 31 uses a longer expression to do the same sort of ‘identificational’ work. Here, the speaker is recounting the plot of a cowboy movie in which the two main characters have already been identified as ‘John’ and his friend, an older man. Needing to identify this second man at a later point in the story, she says:

(31) ... na em, MAN ia, [lapun man ia], stap autsait ia (Diane G.) ‘... and this MAN, [this old man], stayed outside.’

Later in the same story, the old man in the interim having been shot in the leg, Diane uses a sentence given above as 4, in which she identifies the old man: Dispenia man ia, [lek bilong en idai ia], em istap insait nau ‘This man, [whose leg was injured], stayed inside.’

A comparison of the ia-bracketed materials in 31 and 4 indicates that, though their syntactic structures are different (an NP in apposition in 31 vs. a relative clause in 4, above), their identificational function within the discourse is identical (they even refer to the same man, in the same story!), as is the structure of their insertion into their respective matrix sentences. In these two respects, both sentences are also identical to 29 and very similar to 30 (which differs only in that the sentence ends immediately after the re-identification, and is lacking the

or confusion might arise as to who or what is being talked about, rather than the other way around.’ Our view is that ia is used in both of these apparently disparate ways—and that they are not in fact so very disparate, as we shall attempt to show.
second *ia*—a feature which will be discussed later). All have the characteristic, rising, 'comma' intonation marking the expression inserted after the first *N ia*.

In 25–28, the referents of items qualified by *ia* are fairly obvious, whether because of the immediate non-linguistic circumstances of the discourse, or because *ia* tags something whose referent had previously been made clear, or was correctly identifiable by hearers because of knowledge or understanding they had. In such sentences, *ia* can be seen as somehow backward-looking; it alerts listeners to the fact that they are supposed to know 'which N'. But 29–31 and 4 mark a subtle shift. Though *ia* is still 'backward-looking' in the same sense, we see that the first *N* chosen and tagged with *ia* may not be felicitous (it may be inadequate for correct identification of the referent by hearers, or it may not be an identification appropriate for use in the immediate context).\(^{17}\) Once there is any doubt about the referent of an item tagged by *ia*, a speaker may make another try at providing an identification. The most likely place to correct a potential trouble (e.g. misidentification of the correct referent) is immediately after the possibility of trouble has occurred, i.e. after the first *N* tagged by *ia*; hence *ia* becomes, in effect, the potential marker of a place where another try at identification may be made. Thus in 29, *boi*, a generic term whose referent (even in the context) might have been any of the three brothers, is replaced by *Dasti*, the name of the specific referent; in 30, a new term used to refer to the spirit-person, *tamberan*, is replaced by the only term which has previously been used for this referent in this discourse, *masalai*.

However, as we saw by comparing the function of the bracketed material in 31 and 4 with that in 29–30, such one-word re-identifications are but the simplest type of a class of expressions that can be inserted parenthetically after *ia*, and whose function is identificational. As the marker of the beginning of a parenthetical expression of some sort,\(^{18}\) *ia* can be conceived as a left-hand or initial bracket. Indeed, this was the function of *ia* occurring after the head NP in the relative clauses of §1, and after the focused noun in the cleft sentences of §3.

An extension of this 'identificational' use of the slot after *ia* occurs in more clearcut cases of 'correction' than in the simple replacement of a term by a more precise one, or by a descriptive phrase;\(^{19}\) and this provides a second type of evidence for our argument that problems of identification can occur, and that they are often repaired immediately after the first instance of *N ia*. Speakers, e.g., in replacing one term with another, may admit the first was an 'error' by saying something like 'whoops', 'sorry', or 'I mean', any of which could serve as a gloss for *wonem* (literally, 'what') in the following:

(32) *Tupela ikam long dispela KAR ia,—wonem, HOS ia!* (Diane G.) 'The two of them came in this CAR,—uh, on a HORSE!'

\(^{17}\) Cf. the discussion of these issues in Schegloff 1972.

\(^{18}\) Our use of the term 'parenthetical expression' will be restricted to relative clauses (both restrictive and non-restrictive) and to other appositive expressions which relate informationally to some *N* in the matrix sentence. We do not mean it in Emonds' sense (1973:335) of 'parenthetical clauses' which specifically do not 'dominate a phrase node (such as NP)', but rather refer to, or comment on, a whole independent clause.

\(^{19}\) We do not mean to imply that ALL 'correction' in Tok Pisin requires the use of *ia*, but simply that its existence provides one important mechanism for certain types of correction.
In other cases, speakers re-assert that a first identification was correct. This is the function of *yes, kanu* below:

(33) *Nau ol igó long solwara tu na lukim stik bilong SAMAN ia, yes, KANU ia* (Donald D.) ‘So they went down to the sea and saw the pole of the OUTRIGGER, yes, the CANOE.’

A third type of evidence for the use of *ia* in problems of identification comes from cases where the first *N* tagged by *ia* is not a noun at all, but one of the very general pro-forms typified by the interrogatives *wonem* and *husat*, which are glossed in English by words like *whatchamacallit, whosis, thingamabob, whatisname* etc. These are used in ‘word-searches’—e.g. in 17 above, where the pro-form was *husat*. Three examples using *wonem* are cited as 34–36. This usage is very frequent, particularly among children (all the cited examples come from the speech of children and adolescents):

(34) *Na em isingautim olgeta, WONEM ia, MAN long ples bilong kam luk sanap na lukluk* (Elena Z.) ‘And she called out to all the UH, PEOPLE from the village to come and see, stand up and look.’

(35) *Na disfela seken pikinini ia bai em igó long wanpela bikpela WONEM ia, TAUN street na bai em iwok* (Celía D.) ‘And this second child will go to a big THING, a real TOWN and he'll work (there).’

(36) *Ol ikilim disfela WONEM ia, MERI ia* (Paul T.) ‘They killed this THING, this WOMAN.’

A fourth kind of evidence of the potentially problematic nature of identifications comes from sequences where speakers other than the one who has said *N ia* are involved in confirming, questioning, and adding to identifications. This evidence will be presented in §5.

First, however, we must return to the notion of *ia* as a left-hand or initial bracket, introduced in the discussion of examples 29 ff. As we noted, these examples all involved ‘backward-looking’ use of the slot after *ia*, inserting information designed to identify ‘which *N*’. But a deictic marker which has become a potential initial bracket for a parenthetical expression provides another important structural possibility, viz. the ‘forward-looking’ use of the slot for the insertion of ‘new’ information. Thus, in using the expression *N ia* about an item mentioned for the first time, about which hearers may have no prior knowledge, a speaker can use the slot provided after *ia* to supply a description or CHARACTERIZATION, rather than an IDENTIFICATION. He is thus saying, in effect, ‘this *N*’ (about which I am going to tell you something relevant) instead of ‘this *N*’ (which you are supposed to know about). That is, IDENTIFICATIONS instruct hearers, ‘Search in your file to see which one this is’; CHARACTERIZATIONS instruct them, ‘Open a file on this *N*, and put this information in it.’

The conversational use to which the information in characterizations is put is quite varied, and does not immediately concern us here. Suffice it to say that one important use is for later identifications. Thus sentence 7 above, re-cited here for convenience, characterizes a newly introduced item, a piece of cloth, as having corn and cassowaries on it: *Mama iputim DISFELA ia, [igat kon na muruk samting istap ia] em iputim igó* ‘Mother put THIS ONE, [which has corn and cassowaries
on IT], she put IT down.' The bracketed material here is not identificational; i.e., ‘having corn and cassowaries on it’ is not serving to distinguish this cloth from some other piece of cloth. It is obvious from the context and from the ‘comma’ intonation that the cloth’s referent is not in question, and that the description of the pattern on it is simply a characterization. Much later in the same conversation, the speaker uses this characterization identificationally, asking:

(37) *Yu lukim DISPELA ia, [kon wantaim muruk isanap long EN ia]?* (Emma M.) ‘Did you see THE ONE [that had corn and cassowaries on IT]?’

Another previously cited example is sentence 1: *MERI ia [EM i yangpela meri, draipela meri ia] EM harim istap* ‘This GIRL, [WHO was a young girl, big girl], was listening.’ Here, the question ‘which girl’ is irrelevant, and (as with ‘which cloth’ in 7) the bracketed material does not address itself to this question. This time, however, the bracketed material is used not for later identification of the girl, but is a necessary fact in understanding the next event in the story.

A last example of the use of *ia* in characterizations is taken from a conversation about the dangers involved in going alone to work in a garden. After expounding on the dreadful things that might happen to a person, Emma M. says, ‘So I carry this enormous bush knife’, which statement is greeted by a round of laughter. During the laughter, she starts to go on with an episode of her story, ‘So I—’; but she interrupts herself, as soon as the laughter is over, with an additional characterization of the knife as belonging to her husband:

(38) Emma: *Na mi karim draipela bus naip ia* ‘So I carry this enormous bush knife.’

2 women: (laughter)

Emma: *Na mi—[papa—bilong papa bilong John ia] mi karim* ‘So I—[father—John’s father’s], I carry.’

There has been no previous mention of a knife in the conversation (nor is it mentioned again); and the characterization of it as belonging to ‘John’s father’ (Mr. M.) is not provided in order to help listeners identify it, the specific referent of *bus naip* being irrelevant. Comparing the syntactic structure of the bracketed material in the examples of characterizations (7, 1, and 38), as we did earlier with identifications, we see once more that there is variation from ‘full relatives’, like 7 and 1, to genitives, like 38, though we have found no one-word parenthetical expressions analogous to those used in identifications.

We have seen how a demonstrative or deictic *ia*, postposed to the noun it qualifies, can come to act as a potential left-hand bracket in providing a slot for the insertion of a parenthetical expression: potential, because in many cases the referent is clear, there is no identificational work to be done or new information to be inserted, and the possible slot provided after *ia* is not exploited, as in 25–28. We have not, however, exhausted the structural possibilities of the use of *ia* in discourse. In particular, we shall see in §5 that *ia* provides a slot which is available to all participants in a conversation; thus its analysis bears on problems of discourse sequencing, as well as on those of the organization of information. Lastly, the reader may have noted that we continue to talk about ‘*ia*-bracketing’, and even to insert left and right brackets in our transcriptions of examples, though as yet we
have provided an analysis only of how *ia* can come to act as a left-hand or initial bracket. *Ia* as a right-hand or terminal bracket is a further problem dealt with in §5.

5. *ia* in Discourse (Use by More Than One Party). In §4, above, we argued that *ia*, postposed to a particular N, has the basic function of focusing on that N—its deictic force being used to specify this N as opposed to some other, or simply to foreground a particular NP among others in the discourse. Its focusing function and its position make it an ideal place, we have argued, for re-identifications, in the case that the first N may somehow be inappropriate, or that its referent may be in some doubt. We showed two examples of this, 29–30, in which speakers replaced an infelicitous first N with another. Such renamings were, however, seen not to be the only way to remedy an unsatisfactory identification, since speakers may use the parenthetical slot after an initial *ia* to refer to properties of the N, as seen in 31 and 4. In both cases, however, the parenthetical expression served to identify the N.

In the examples considered so far, potential problems of identification have been dealt with or corrected by the speaker's using the slot after *N ia* either to rename more appropriately or specifically, as in *boi* → *Dasti* in 29, or in *tamberan man* → *masalai* in 30, or to provide a description which refers back to a previous characterization, as in 31 and 4. But in none of these cases did speakers manifest much doubt about whether hearers were in fact having problems of identification: there was no hesitation, no rising intonation on the *ia* after the bracketed material, and speakers continued on without interruption (Sacks & Schegloff report parallel findings in such cases). *Boi*, *tamberan man*, and *man* may have been insufficient initial identifications; but the parenthetical material included to clarify or correct was apparently entirely adequate to do the job. In 29, hearers had been told that the boy's name was Dusty because he played in the dust; in 30, the *masalai* had been discussed at great length; in 31 and 4, the facts that the *man* was old and had broken his leg had very recently been mentioned, clearly did not apply to any of the other characters in the story, and were almost sure to identify the *man* uniquely.

In other cases, however, a potential doubt about the adequate identification of an item is evidenced by an acknowledgment of identification by the hearer immediately after *N ia*, sometimes only a nod but often a very soft 'Mm' or 'Mm hmm', 'Yes', or 'Yeah'. Such acknowledgment sometimes occurs after a first *N ia*, as in 39, where the speaker uses rising intonation (marked by circumflex accent):

(39) Diane G.: *Na biain disfela MISIS ia* 'And later this (white) LADY?'
Lalia T.: *Ye* 'Yeah'
Diane G.: *em igo* 'she left.'

In such cases, the speaker may not insert any parenthetical material after the identification has been acknowledged; but we also often find multiple renamings, as in 40, or descriptions, as in 41–42. In such cases, speakers wait until they have clearly satisfied themselves and/or hearers before ceasing to re-identify. In 40, Mrs. M. begins by resolving the previous topic (the mission store where she buys sewing supplies) by coming up with the name of the storekeeper, Pastor Brown, to which Mrs. T. responds with an affective comment (which already indicates that she recognizes the referent). Then Mrs. M., in the course of changing the topic to
discuss the linguistic abilities of Mrs. Brown, a topic which then continues for some time, renames Brown three times, beginning with Fata (the term usually used for a Catholic priest), replacing it with bingsu (the term for a Lutheran missionary, which Brown is), and replacing this in turn, emphatically, with his name. Each successive try is followed by ia (without question intonation), and by an acknowledgment by Mrs. T.:

(40) Mrs. M.: *Em bingsu, bingsu, ... Brown* ‘It’s pastor, pastor, ... Brown.’
Mrs. T.: *Em, taranggu, i gutpela man* ‘Yes, poor dear, he’s a good man.’
Mrs. M.: *Bingsu Brown, misis bilong, misis bilong, FATA ia,* ‘Pastor Brown, the wife, the wife, of this FATHER,’
Mrs. T.: *Mmm.*
Mrs. M.: *[Em, BINGSU ia]*, ‘Uh, this PASTOR,’
Mrs. T.: *Mm-hmm.*
Mrs. M.: *[BROWN ia]*, man! *Tok Yabem bilong en,* [claps hands once] *olosem tok ples bilong en!* ‘This BROWN, wow! Her Yabem [hand clap] is just like her native language!’

Ex. 41 goes even farther in resolving problems of identification:

(41) N.S. *Ologeta karim kago na i go pinis*—‘They all carried their belongings and went off—’
G.S. *Long maunten?* ‘To the mountain?’
N.S. *long HAP ia* [yu lukim bikpela VILIS ia] ‘to this PLACE [where you see a big VILLAGE]’
G.S. *Mm.*
N.S. *[Em yumi go, na i go long Mumeng ia]* ‘[that you go to, to go to Mumeng]’
G.S. *Yes*  
N.S. *EM ia, [ol igo istap]* ‘THAT’S [where they went and stayed]’.

Here the speaker’s rising intonation on ia after *villis* ‘village’ and *Mumeng* indicates some doubt on her part as to whether it will be adequate to do the job of identification. The hearer, G.S., has asked for specification of the place, and the speaker, N.S., uses two *ia*-bracketed relative clauses to explain exactly where the place is. As in 40, the hearer’s first acknowledgment, ‘Mm’, is very soft, and the second (here, ‘*Yes*’) is louder and more assertive. N.S. then finishes the interchange with an emphatic cleft sentence, ‘THAT’S where they went and stayed.’ Note that there is no rising intonation on either the initial *ia* after *hap* ‘place’ or the *ia* in the final cleft sentence, a fact which will inform our discussion of the different functions of initial *ia* and final *ia* in general.

A last example, showing some doubt on the speaker’s part coupled with acknowledgment of identification, is intermediate between 39, with no parenthetical expression, and 40–41, with two each. Ex. 42 has just one such expression:

20 Yabem, or Jabém, is an Austronesian language from the north coastal area of the Huon Gulf; it has been spread as a lingua franca by the Lutheran Mission throughout much of the Morobe District.

21 The left bracket indicates two speakers beginning at the same time. Conventions used in the transcription of overlaps are those proposed by Sacks, Schegloff & Jefferson (1974:731).
We saw in 39–42 that the identification accomplished by *ia*-bracketed material is not necessarily assumed, or automatic; it involves interactional work, a checking-out of acknowledgement, negotiation of what is mutually understood. Acknowledgement may occur after the first N, as in 39, 40 and 42; or hearers may wait until after the first parenthetical expression, as in 41. They may then, of course, continue to acknowledge after subsequent parentheticals. But the interactional use of *ia* goes much deeper than this. As a point at which further information about the item set off or qualified by *ia* can be inserted, the potential bracket opened after a potential left-hand *ia* can be used not only by present speaker, but also by any other speaker who wishes to insert pertinent information. As soon as an item has been qualified as ‘*this one*’, there is the possibility of a parenthetical expression consisting of (a) smoothly-inserted information by present speaker, as in 29–31 and 4; or (b) a self-interruption (often in the form of a correction) by present speaker, as in 32–36; or (c) an interruption by a new speaker, as we shall see below. Thus, like many other elements of the turn-taking system (cf. Sacks, Schegloff & Jefferson), *ia* is open for use by all conversational participants, and provides an opening for any new speaker.

Word replacements, e.g., need not be done by present speaker, but may be done by a next speaker, as in 43, where Nat corrects Paul's description of a sorcerer's spell:

(43) Paul T.: ... *wokim olosem na rausim wanpela ston na wanpela, a, NIL ia*  
   ‘... they do it like that and take out a stone and a, uh, NAIL,’  
   Nat P.: *NIDOL ia* ‘a NEEDLE,’  
   Paul T.: *bilong sowim samting* ‘for sewing things.’

The next example of the use of the slot after *ia* by a next speaker also extends the analysis in another way. At the end of §4, we sketched an argument which held that speakers use *ia*-bracketing not only to provide identifications (‘backward-looking’ in the sense that they ask hearers to draw on some information they already have, in order to identify the N), but also to provide initial characterizations of some ‘new’ N (‘forward-looking’ in the sense that the slot is used to supply information hearers do not already have). Of course, the information supplied in an initial characterization may later be used parenthetically for identification (another important sense of ‘forward-looking’), and initial characterizations may be done in a variety of ways. What is of interest here, however, is that they are often done in exactly the same way as are identifications, i.e. with a parenthetical expression bounded on both sides by *ia*. We illustrated this in 1, 17, and 38. But whereas in identifications the question of adequacy is always relevant (is the N, and/or the parenthetical material provided, adequate or appropriate for...
identification?), giving hearers something to acknowledge (as in 39–42), the fact that characterizations provide ‘new’ information means that very often there is nothing for hearers to acknowledge. How are they to know whether a characterization is ‘adequate’ until later on, when they find out how it is to be used?

In some circumstances, however, participants may be able to acknowledge or challenge a characterization. This can happen, e.g., when there are several hearers present, and one or more of them shares the information which the speaker is imparting. Thus characterizations, as well as identifications, can be accomplished jointly (though this is a rarer event).

We mentioned, in discussing the issues of identification involved in 31, that the ‘man’ in the cowboy movie had already been characterized as ‘old’, and that the parenthetical material used in the identification was pulled out of the previous characterization. We shall now see how that initial characterization was made, collaboratively, by the three people who have seen the movie and who are jointly recounting it to a group of listeners. Diane G. is the chief narrator; but the two young boys who saw the movie with her, Paul T. and Nat P., pay close attention and interrupt her on a number of occasions (curly braces enclose the whole ‘characterizational’ transaction):

(44) Diane: *Dispela John wantaim narapela*  
*PREN bilong en ia,*  
*{(dispela MAN ia),}*

Paul: *Wanpela lapun [papa!*

Nat: *Papa bilong en!*

Diane: *Yes, papa—ah, ino papa bilong en, PREN bilong en ia!*

*Tupela ikam ...*

‘This guy John with this other FRIEND of his,'  
‘the two of them—'  
‘An old [father!']  
‘his father!’  
‘Yes, his fa—uh, not his father, his FRIEND!] The two of them went ...’

The problem here concerns the proper characterization of John’s sidekick, here being mentioned for the first time, and whose name no one seems to remember. Diane initially refers to him as John’s ‘friend’, but immediately inserts (using ia-brackets) a parenthetical expression characterizing him as *dispela man ia* ‘this man’. (This may seem completely uninformative as a characterization to the reader unfamiliar with Tok Pisin; but note that the usual meaning of *pren* is ‘friend of the opposite sex, lover’; saying he is a MAN clears up a possible confusion that a girlfriend is the referent.) Paul, who had waited for Diane to provide some characterization by not interrupting after the first *ia* (the initial bracket), now with split-second timing interrupts after Diane’s second *ia* (the terminal bracket), apparently judging her characterization of the second man to be insufficient, and himself provides a characterization of the man as *wanpela lapun papa* ‘an old father’. Meanwhile (back at the ranch) Diane has begun to continue her story with *tupela* ‘the two of them’, which is overlapped by Paul’s *wanpela*, at which point she desists. Paul continues with *lapun* ‘old’ in the clear; but then Nat, anticipating what Paul is going to say, chimes in with *papa* at the precise time Paul is saying *papa*—continuing, after Paul has finished, with *bilong en* ‘of his’. Diane recommences, starting to adopt this new characterization of the man as ‘John’s father’, but
then denies it, returning to her original statement that he is simply John’s friend. She closes the material within braces, in which there has been an interaction among all three participants as to the proper characterization of the man, with a final ia, and continues with tupela as she had been doing when interrupted by Paul. Note that what was finally established was that John’s friend was a man old enough to be his father, though not his father, but definitely an ‘old man’ (lapun man), the precise words Diane later uses to identify him in ex. 31.

Like Keenan & Hull, we have rejected a strictly syntactic view of relative clauses, in order to show some of the properties which relative clauses share with other constructions. But whereas their analysis is based on a study of isolated sentences from a logical and semantic perspective, ours examines sequences of utterances within a discourse context, trying to understand how the relevant construction types are actually used in the exchange of information. Thus Keenan & Hull (350) state that one of the logical similarities shared by wh-questions, relative clauses, and cleft sentences is that they all ‘have a condition given by a sentence S that they impose in some way on the noun phrase separated off from it. Further, they all presuppose that some member of the world satisfies this condition, and are concerned with the member or members which actually do satisfy the condition.’ This is one way of understanding why a focusing particle is such a likely candidate for doing the syntactic work of separating the NP off from the embedded sentence in the three types of constructions, as is true in a number of the languages on which Keenan & Hull present data. But we would argue that this is, in fact, better understood as a property of any parenthetical expression which does identificational work. Use of lapun man ia ‘this old man’ in 31 presupposes that there is such a member of the world, just as does the embedded relative lek bilong en idai ia ‘whose leg was injured’ in 4 and the use of the name Dasti in 29. All these cases involve the identification of ‘the member or members which actually do satisfy the condition’.

But not all sentences which use the forms available for doing identificational work in fact use them in this way. Characterizations, e.g., often use ia-brackets, though the work they do is not identificational (cf. sentences 1, 7, and 38). To illustrate with a sentence which was cited earlier, let us reconsider the cleft sentence 21, ‘It was an American who gave her her name.’ Though, logically, we could say that it is ‘presupposed’ that someone named the little girl in question, and that the sentence is focusing on ‘which member of the world’ is the one to have done it, this is in fact not how the sentence functions in the context. Rather, the speaker is attempting to introduce a new topic, and is using this construction for arranging two new bits of information: that someone named the child, and that the person was an American. In this case, ia has a clear focusing function; but an analysis of the sentence as locating which member of the world satisfied the ‘presupposed’ condition is not the most useful way of understanding it. In other words, we feel that it can be misleading to use the formal properties of a construction in

22 On related problems of out-of-context discussion of presupposition, see Sherzer 1973. For an illuminating discussion of the relationship between syntax and information structure, see Halliday 1967, especially pp. 203 ff. on ‘information focus’.
arguing about its possible function, the understanding of which is more readily observed from the uses to which it is put.

It should come as no surprise that a focusing particle like *ia* is not specific to the three syntactic types discussed by Keenan & Hull, but that its use is governed by discourse considerations dealing with the structuring of information exchange. In analysing how *ia* is actually used, we have seen that, for speakers and hearers, 'presupposition' is often problematic, and that the structures which seem to be built for dealing with presupposition (in our terms, determining whether or not the bracketed material is adequate or appropriate for identification or characterization) contain the mechanisms necessary for the interactional negotiation of these problems. Thus, in some cases, speakers manifest doubt about whether hearers will be able to identify a particular *N*, either by using a rising intonation on the *ia* which follows it (the first or left-hand bracketing *ia*), as in 39, and/or by adding one or more identificational expressions after it. A rising intonation on the *ia* following such an expression (the second, or later *ia*) is also not at all uncommon, as speakers use it to check whether the identification or characterization given has been sufficient (cf. also Sacks & Schegloff). But note that such a right-hand or 'terminal' *ia* is only potentially terminal: if the identification or characterization still turns out to be insufficient, the speaker may well continue to provide further information, and each potentially terminal *ia* then also marks the slot at which a new parenthetical expression can begin. Further, the system provides an opening for a next speaker to use the slot, whether to question or correct the identification or characterization, to confirm that it has been understood, or to provide further information for a third party.

We saw earlier that left-hand or initial *ia* is also only potentially so, since an *N* may be tagged with *ia* (usually with emphatic or fading intonation) and nothing more. But this (potential initial) *ia* may also receive a rising intonation, when there is doubt about the identification of the referent. Any *ia* (with rising intonation or not; potentially initial or potentially terminal) can mark a slot where hearers can question or acknowledge, and where either present speaker or a next speaker can provide a parenthetical expression; but most identifications and initial characterizations are limited to one such expression. Thus *ia* occurring after any such expression is very likely to be serving as a terminal bracket, functioning to announce to hearers that the parenthetical expression is over, and that what follows belongs to the matrix or higher sentence.

**6. An Initial View of the Placement of *ia* with Respect to Relative Clauses and Cleft Sentences.** We indicated in §§1–3 that some relative clauses and cleft sentences do not use *ia*-bracketing; i.e., they lack either initial *ia*, or final *ia*, or both. We shall now attempt to use what we have learned about the wider functions of *ia*, in deixis and in discourse, to understand those cases in which *ia* is not used. Our analysis treats as crucial the deictic or focusing function of *ia*, the different roles of *ia* as an initial and final bracket, and the question of word order in syntax.

Table 1 presents the 112 relative clauses and cleft sentences we have considered according to the syntactic position of the head noun in the matrix sentence, and the presence or absence of initial and final *ia*. The 19 place relatives are not included
in the totals for each type of bracketing, as they do not typically use *ia*-bracketing and are not dealt with in this discussion (figures on them are included for comparative purposes).

Table 1.

<table>
<thead>
<tr>
<th>TYPE OF IA-BRACKETING</th>
<th>PLACE RELATIVES</th>
<th>RELATIVE CLAUSE</th>
<th>CLEFT SENTENCES</th>
<th>TOTAL (excl. place relatives)</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>ia</em> ... <em>ia</em></td>
<td>5</td>
<td>6</td>
<td>11</td>
<td>6</td>
</tr>
<tr>
<td><em>ia</em> ... Ø</td>
<td>1</td>
<td>6</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Ø ... <em>ia</em></td>
<td>1</td>
<td>6</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>Ø ... Ø</td>
<td>12</td>
<td>16</td>
<td>14</td>
<td>4</td>
</tr>
<tr>
<td>TOTAL</td>
<td>19</td>
<td>34</td>
<td>38</td>
<td>18</td>
</tr>
</tbody>
</table>

23 Neither time nor place relatives use *ia*-bracketing to any degree. Our data on time relatives confirm the descriptions provided by Laycock (1970a:xxii) and by Wurm. The latter states (p. 72): ‘If a conjunction is used, the concept expressed in English by *when* is rendered by *tainm* or *long taim*, and the temporal clause usually precedes the main clause.’ An example from our data is: *Tasol disfela TAIM [mitupela igo long Mumeng], em istap long Lae yet* (Lalia T.) ‘But WHEN [the two of us went to Mumeng], she was still in Lae.’ Here, as in many such sentences, the speaker uses rising intonation to mark the end of the embedded temporal clause.

Place relatives are, however, more interesting: though they do not typically use *ia*-bracketing some speakers appear to have extended this marking either as an adjunct to, or in replacement of, the usual construction, an example of which is: *Na igo stret long PLES [igat maunten long EN]* (Tim D.) ‘And he went straight to the PLACE [THAT had a mountain on IT].’ We see that there is no marking other than the pronominalization of *plies as en after long* in the embedded sentence; *long en* occurring in final position within the embedded sentence (as it regularly does) is sufficient to indicate the end of the embedding, if the matrix sentence continues. *Long* cannot occur without *en*, as noted in connection with sentence 9. But *long en* can be left out entirely, in which case *ia*-bracketing normally applies.

24 We do not propose to debate the transformational issues involved in the underlying structure of cleft sentences. Here we follow Keenan & Hull's reasoning: ‘in saying “the constituent is moved out of the sentence”, we only use this metaphor to make the nature of the surface syntactic form clear, and do not want to commit ourselves to this as the transformational origin of the constructions’ (p. 370, fn. 2). Interestingly, as noted by Rickford, *ia* is frequently used in sentences of the predicate nominal type, such as: *Em WANTOK ia* (Tim D.) ‘It’s (that’s) the friend’ and *Em TUMBUNA STORI ia* (Tim D.) ‘That’s an ancestral story.’ The addition after *ia* of a parenthetical clause which ‘modifies’ the predicate nominal in such sentences yields a cleft sentence of exactly the type we are considering, thus: (19) *Nogat, em WANTOK ia [putim long maunten ia] ... ‘No, it was my friend [who was wearing it on the mountain] ...’*
The frequent use of initial *ia* in cleft sentences can best be explained as concerning the focusing function of *ia*. The preposing of the noun to which *ia* attaches is one way of topicalizing; and many such sentences are said very emphatically, the specific referent being vigorously contrasted with another possible candidate. Indeed, as in 18–20 above, speakers often use cleft sentences in correcting misidentifications by a previous speaker. We will repeat only partial glosses:

(18) 'it's the YOUNGER brother' (previous speaker had thought the elder brother was being discussed).
(19) 'no, it was my FRIEND' (not me, as previous speaker had claimed).
(20) 'it's the FIRST wife ... [who will go to Lae] (not the new girlfriend or 'second' wife who has packed her bags in vain).

Of the seven cleft sentences not using *ia* after the preposed NP, two use alternate focusing words: *tasol* 'only, the very one' in 45, and *yet* (intensifier, often glosses as 'self') in 46:

(45) *Yu dispela BOI tasol [ikam na stilim kararuk bilong mi]?* (John L.) 'Are you the very BOY [who came and stole my chickens]?'
(46) *Em MAMAPAPA bilong mi yet [ol ibaem em]* (Melissa K.) 'It was my PARENTS themselves [who paid for it].'

In neither case is the speaker correcting a misidentification; but there are, of course, many cleft sentences using *ia* which also do not correct misidentifications, e.g. 21, which we discussed in §5, in connection with presupposition.

The five remaining cleft sentences that use neither *ia* nor any other focusing particle to separate the preposed noun from the following embedded sentence seem to rely on intonation and word order (the preposing itself) to accomplish this separation, and are not otherwise analytically distinct from the cleft sentences using *ia*. Examples are:

(47) *Em ino bus, em ROT, [mama bilong en wokim]* (Paul T.) 'It wasn't the forest, it was the PATH, [his mother had made].'
(48) *Em DISPELA [mi toktok long EN]* (Tony T.) 'That's THE ONE [I'm talking about].'

Despite such exceptions, it is clear that most cleft sentences are syntactically specific examples of a general 'topic-comment' structure which involves left dislocation or preposing of the 'topicalized' element, attaching *ia* to it, and making a comment about it.

Before returning to a consideration of why right-hand or final *ia* is rather infrequent in cleft sentences, as well as to a discussion of the other cases of Table 1, it is important to re-examine in greater depth the distinction made in §5 between IDENTIFICATIONS and CHARACTERIZATIONS.

7. MORE ON IDENTIFICATIONS AND CHARACTERIZATIONS. In §4 we stated that any N having a definite, specific referent can have *ia* postposed to it, which can in turn be followed by a parenthetical expression. We distinguished IDENTIFICATION, where the parenthetical expression (whether a re-identification or a description) asks hearers to search to identify a specific referent already known to them, from CHARACTERIZATION, where the N used has a definite, specific referent, but where hearers are not asked to identify it—the slot after *ia* being used to provide a
characterization which is often 'forward-looking' in that it will later be used for identification. Though the information states of hearers differ radically in the two cases (cf. Goffman 1974: 133-4, 506-8), we argued in §4 that, in both identifications and characterizations, referents are definite and specific from the speaker’s point of view, and therefore can have *ia* attached to them. (It is important to note that many relatives qualify neither as identifications nor as characterizations; but we shall postpone a discussion of this until §8.)

The distinction between identification and characterization is based mainly on the work done by the parenthetical expression. We noted that IDENTIFICATIONAL expressions use information presumably known to hearers (whether a renaming or a description),\textsuperscript{25} to identify specifically one of two things: (a) an item that has been mentioned and characterized earlier in the same conversation; or (b) an item that is being mentioned for the first time here, but that hearers can uniquely identify from prior knowledge.

A classic example of the first sub-type (which abounds in story-telling) was the man ‘whose leg was injured’ in 4, the man having been so characterized earlier in the same conversation. The second type is much less common, and also poses a number of analytical difficulties—because, although the parenthetical expression does function principally to identify the item, it is also often serving simultaneously as a characterization of the item for purposes of the present conversation. One fairly clear case is the excerpt cited as 41 above, in which N.S. identifies a *hap* 'place' mentioned for the first time in this conversation, but which she assumes is already known to the hearer, and her two parenthetical expressions seek to enable G.S. to identify it specifically. Another example is:

\begin{equation*}
(49) \text{Na em, wanpela MERI ia, [bos bilong mipela ia, [MERI bilong en]], EM igat bel nau (Emma M.) ‘And this WOMAN, [our boss, [his WIFE]], SHE was pregnant then.'}
\end{equation*}

_Wanpela meri ia_ ‘this woman’ is here being mentioned for the first time; but Mrs. M.’s parenthetical expression, ‘our boss’s wife’, does indeed seek to identify her specifically. (The hearer in this case had seen the boss’s wife, but did not know her personally—and so would not have recognized her name.) And though the parenthetical expression could in some sense be said to provide an initial characterization of the woman, the information which Mrs. M. uses to identify her later in the discourse is the fact that she was pregnant. In both examples, then, the identificational function is primary.

A similar distinction can be made with respect to parenthetical expressions which provide characterizations. Here the work done by the parenthetical expression is that of providing new information about the *N* it qualifies; but it may characterize a new *N* being introduced for the first time, or it may tell hearers something new about an *N* whose referent has already been clearly identified (in

\textsuperscript{25} 'Presumably' here is an inference about the function of the parenthetical material provided by speakers. In such expressions, speakers seem to supply material which will be adequate to the job of identification, and which we can therefore suppose that THEY PRESUME will work, i.e. be known to hearers. If it does not work, of course, speakers can 'recycle', recursively, with a further, again 'presumably known' parenthetical expression.
story-telling, these are often recharacterizations). In addition to the characterization of the piece of cloth in 7, of the girl in 1, of the bush knife in 38, and of the old man (collaboratively) in 44, other examples of initial characterizations (of N's being introduced for the first time) are:

(50) Mi save lukim wanpela DOK ia, [ya bilong EN blekpela], na mi save fret long EN (Elena F.) ‘I saw this DOG [that had black ears], and I was afraid of IT.’

(51) Em igo na kisim wanpela MERI ia [em, disfela papa bilong mi ia, [susa bilong en, liklik bilong en]] (Sarah D.) ‘He went and got this WOMAN, [uh, this ‘uncle’ of mine, [his sister, his little sister]].’

To understand that the parenthetical expression in 51, superficially so similar to 49, is not functioning to identify, it is necessary to know that none of the hearers knows either the uncle or his little sister, who figure here in a story of long ago and far away. No one is expected to identify them specifically, or recognize them.

In the second type of characterization, which we referred to above as ‘recharacterizations’, the N about which a new comment is made is virtually always the immediately previous topic; there is no question at all that the ‘comment’ expression following it might be doing identificational work, since its referent is absolutely clear. For reasons that will be explained below, it is rare for the form of recharacterizations to be truly ‘parenthetical’, in the sense of having the ‘comment’ expression followed by any other material in the same sentence. Two examples of recharacterizations typically lacking this parenthetical structure are 52, from a story in which there is only one dog, which has already been mentioned many times, and 53, from a story where the hero, a king, has similarly been often mentioned:

(52) Dok ia, em naispela dok (Paul T.) ‘This dog, he was a nice dog.’

(53) King ia, wok long wetim pikinini bilong en, pikinini bilong en ino kam (Wilma D.) ‘This king, kept on waiting for his child; his child didn’t come back.’

Let us summarize the similarities and differences among the four types of expressions we have discussed. First, referents are always definite (the precise sense in which this is meant is explained in §8), and also specific, certainly for speakers. But only in the case of recharacterizations can hearers uniquely identify the referent on hearing N ia without its immediately following parenthetical expression. Thus, in this case, the expression following ia serves only to insert new information about a known N. But in two other cases (those involving identification), the parenthetical expression itself enables hearers to uniquely identify the N. That is, speakers may use such an expression in this way to identify an N uniquely, whether or not it has previously been referred to in the current conversation. Note that both sub-types of ‘identificational’ parentheticals correspond to restrictive relative clauses, insofar as they restrict the universe of possible referents of the N to which they are attached. (The correspondence is not complete, in that the form of the parenthetical may be anything from a single noun, to an NP, to an embedded sentence.) In the last type of expression—new characterizations—hearers are not expected to be able to identify the referent uniquely even after the parenthetical expression, since it applies to a new N which they are not expected to recognize; its function is to tell
them something relevant about it (they may, of course, be expected to use this information in making a later identification). Thus in the two sub-types of 'characterizations', hearers are simply told certain 'new' facts, possibly additional facts, about a particular N. In both cases, these correspond to some extent to appositive or non-restrictive relative clauses, in that the information they contain does not function to identify or restrict the universe of possible referents of the N to which they are attached. However, in recharacterizations they do not do the work of identification, because the referent of the N is already totally obvious; and in characterizations of new N's, they cannot identify the referent, because the N in question is completely new to hearers.

8. CONSTRAINTS ON \textit{ia}-BRACKETING. We are now in a position to see why identifications (both sub-types) are more likely than characterizations to be truly 'parenthetical', i.e. to have some material in the same sentence occurring after the parenthetical expression. In 'topic-comment' terms, both cleft sentences and characterizations use the slot after initial \textit{ia} to make a comment about the preceding N; but this is not the case with identificational parentheticals, which occur in sentences which make their comments elsewhere (either before or after the parenthetical expression). Cleft sentences, on the other hand, usually consist only of the preposed-topic N and the embedded-sentence comment; thus there is no need to separate the embedded sentence from any following material. And characterizations have a parenthetical structure only when the sentence in which they occur makes two comments, the first 'parenthetical'—as in 50, where we are told both that the dog had black ears and that Elena was afraid of it. Most, however, are like 52 in containing a single comment, and thus no relative clause.

The fact that the embeddings attached to head nouns in oblique cases and those in cleft sentences are virtually always coterminous with the end of the sentence (we found only one exception, in an oblique case) is what makes them so unlikely to have a final \textit{ia}. There is no following material from which they need to mark a separation. (A pause or other intonational mark will usually indicate separation from the succeeding sentence.) Initial \textit{ia}, however, has an important focusing function in cleft sentences. In oblique cases, \textit{ia} may carry extra weight in view of the greater complexity which usually characterizes such sentences (e.g., most have both a direct and an indirect object); and surface marking of the embedding probably makes them easier to parse. This greater importance of initial \textit{ia} as opposed to final \textit{ia} appears to constitute a specific illustration of Goffman's suggestion (1974:255–6) that:

\begin{itemize}
\item 26 Though only non-restrictive relatives have traditionally been considered 'appositive' (cf., e.g., Langendoen 1969:148–9), many of the parenthetical expressions we have been discussing appear to be both 'restrictive' in function and 'appositive' in form. This is the case for renamings, as well as for some 'descriptive' parentheticals (whether full relatives or not).
\item 27 Susan Ervin-Tripp and Dan Slobin have brought to our attention evidence, from the psycholinguistic literature, that sentences with relative pronouns deleted are more difficult to parse than those retaining relative pronouns. Cf. Fodor, Bever & Garrett 1974; Shipley & Catlin, ms, 6; and d'Anglejan-Chatillon 1975:32–3, as well as Bever's discussion (1970:313–16) of 'perceptual strategy' constraints on the deletion of relative pronouns in English. On perceptual and processing constraints in relation to the surface forms of relatives, cf. also Bever & Langendoen 1971, Kuno 1974.
\end{itemize}
the bracket initiating a particular kind of activity may carry more significance than the bracket terminating it. For ... the beginning bracket not only will establish an episode but also will establish a slot for signals which will inform and define what sort of transformation is to be made of the materials within the episode ... Closing brackets seem to perform less work, perhaps reflecting the fact that it is probably much easier on the whole to terminate the influence of a frame than to establish it.

In this case, the use made of the bracketed materials can involve identification or characterization, and can apply to an N which may or may not be meant to be initially recognized; the ‘informing signals’ include intonation on both the N and initial ia. Closing or terminal ia, on the other hand, can function to confirm an identification emphatically, simply to separate the embedded material from the continuing sentence, or (usually with rising intonation) to do double duty as a potential initial ia for a new parenthetical expression.

It is clear from Table 1 that terminal ia is less frequent in our data than initial ia (46 cases vs. 55 cases). Table 2 indicates that the favored environment for missing final ia is at the end of embeddings which are coterminal with the end of the matrix sentence. Of the 49 sentences in which the matrix sentence continues after the embedding, half do not mark the end of the embedding with ia.

<table>
<thead>
<tr>
<th>MATRX SENTENCE CONTINES</th>
<th>MATRX SENTENCE TERMINATES</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final ia</td>
<td>25</td>
<td>21</td>
</tr>
<tr>
<td>No final ia</td>
<td>24</td>
<td>42</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>49</strong></td>
<td><strong>63</strong></td>
</tr>
</tbody>
</table>

Where the matrix sentence does not continue after the embedding, two-thirds (42 out of 63 sentences) do not mark the end of the embedding with ia. Table 2 also shows that there are 24 sentences in which the matrix sentence does continue after the embedding, but which are not marked with final ia. Of these, 18 are also missing initial ia, and the majority of them have special discourse characteristics which will be discussed below. The remaining six again seem to rely on word order and intonation to clarify the syntax. Two examples are:

(54) **EM ia [bai kapsaitim igo insait] EM orange juice (Jack W.) ‘This STUFF [she's going to pour in] IT's orange juice.’**

(55) **Na, MERI ia [kam long Manam] tok, ‘No, yu noken igo.’ (Alice D.) ‘And this GIRL [who came from Manam] said, “No, you can’t go.”’**

In both these cases, the parenthetical material is said very rapidly and in an undertone, and the following matrix sentence recommences in a louder, more emphatic style. Once more, we observe variation with respect to pronoun-copying after the parenthetical expression; 54 repeats the subject pronoun em, while 55 deletes it.

Lastly, we come to the problem of missing initial ia. The first constraint of importance here is related to discourse considerations: with only one exception, ia does not attach to N’s whose referents are indefinite, as shown in Table 3 (p. 658). The ‘definite–indefinite’ distinction drawn here is not syntactically defined (though it has syntactic consequences with respect to ia-placement). For example,
the 'indefinite' article wanpela can qualify a noun whose referent is definite in our terms, as in 'it was an (wanpela) American' in 21 above, or as in the following:

(56) Wanpela lapun MERI ia [isave stap long ..., EM lapun meri ia] ikam nau tokim Jek, 'Jek!' (Sogana L.) 'This (an) old WOMAN [who lived at ..., SHE was an old woman] came and said to Jack, "Jack!"

Morgan 1972 adduces similar arguments to show that in Albanian 'the coreferential NP in the relative clause is definite when the head NP is indefinite' (p. 67), and that for English, 'the coreferential NP in a relative clause on a true indefinite NP is underlyingly definite' (71). But rather than treating the problem in terms of either the surface syntactic categories of definiteness and indefiniteness—as marked, e.g., by the article—or even dealing with notions of what is (presumably semantically) 'underlyingly' definite or indefinite, we prefer to consider the REFERENT of the NP in question in terms of the information structure of the discourse. Thus, even when the examples cited are individual sentences, as in §§4 and 6, their explication involves recourse to facts such as whether the N is a 'first' or 'later' reference to an item in a particular discourse, and whether or not the parenthetical expression does identificational work—i.e. facts which are available only by examining the discourse or sequential context.

Recall that both types of parenthetical expressions (identifications and characterizations) are considered to have definite, specific referents. In these terms, wanpela N ia is one way of introducing a new, but definite, specific N into a conversation. It says, in effect: 'Consider a new N whose specific referent you don't know, but I do, and I'm going to tell you something further about it.' In contrast, N's whose referents we consider to be INDEFINITE are those referring to ANY MEMBER OF A CLASS defined by the parenthetical expression, but not some particular specified one or group. Indeed, not only do hearers not know 'which specific one', but speakers also do not claim by their reference to identify or characterize 'some specific one'; rather, the parenthetical expression qualifies 'any such one'. Thus, in 57 (instructions to a child about how to make orange juice from powdered crystals), ANY spoon having the qualities specified in the parenthetical expression (i.e. being wet) will have the undesired consequence of making the orange juice powder fizz up:
The use of the term "sorcerer" and related expressions in the texts analyzed is indicative of a specific cultural and linguistic context. The term "sorcerer" can be used to refer to the sorcerer himself, as well as other related expressions. For example, the sentence "If a spoon is wet, it'll make it fizz up" can be paraphrased to include a sorcerer: "Don't use a SPOON [that's wet] lest it go in even a little bit and touch it and it'll all fizz up."

It is therefore not coincidental that many N's having indefinite referents are also qualified by quantifiers, such as planti 'many' in 58 and ologeta 'all, every' in 59; or occur within the scope of a negative, as in 61; or are found in existential sentences like 60–61, as well as 58; or in statements of general facts, truths, or conclusions about the nature of the world, as in 62–64:

(58) *Igat planti MAN [bai igo] (Alice W.) 'There are a lot of PEOPLE [who'll go].'

(59) *Na OLOGETA SAMTING [istap long giraun, wonem kain gol], EM bilong gavman (Bob B.) 'And EVERYTHING [that's in the ground, whatever kind of precious metal], IT belongs to the government.'

(60) *Yutupela noken wari, bai igat narapela KAR [bai igo] (Jack W.) 'Don't you two worry, there'll be another CAR [that'll go].'

(61) *Inogat wanpela TOK [ikamap stret long mi] (Peter E.) 'There is no NEWS [that has come directly to me].'

(62) *MAN [igat inap mani] ken baim (Tony T.) 'PEOPLE [who have enough money] can pay.'

(63) *EM [ol ikolim sangguma] EM man tasol (Tony T.) 'THAT [which they call sangguma] (i.e. anything called sangguma) IT is really human (i.e. not supernatural).'

(64) *PIKININI [ino inap long save long tok ples bilong mama o papa] bai yusim Pidgin (Emma M.) 'CHILDREN [who don't know their parents' languages] will use Pidgin.'

Now though the embedded sentences in 57–64 would qualify as 'restrictive relatives', we see that the distinction of restrictive and non-restrictive is analytically rather unhelpful; what is important to understand about these embedded sentences is that none of them is doing identificational work, since identification of the specific referent of N is not at issue in any of them. Nor indeed is it the function of the parenthetical expression to 'characterize' the N in any way, i.e. to provide information about a particular N. Rather, in all except the existential sentences 58, 60, and 61, the parenthetical expression states the condition under which ANY SUCH N would satisfy the statement made in the matrix sentence. Thus they are all paraphrasable as conditionals, e.g.,

(57) If a spoon is wet, it'll make it fizz up.
(59) If there is any precious metal in the ground, IT belongs to the government.
(62) If a person has enough money, he can pay.
(63) If a thing is called a sangguma, IT is really human.
(64) If a child doesn't know ..., he'll speak Pidgin.

Note, however, that these sentences can also be paraphrased in Tok Pisin with wrt-forms, 'whichever', 'whoever' etc., as in 15–16 above. The sentences we are considering here might look something like:

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28 Mihalic (1971:169) defines *sangguma* as 'secret murder committed by orders from sorcerers'. Our texts also indicate that it can be used to refer to the sorcerer himself.
As in 57–64, most sentences in which the relative qualifies an N with an indefinite referent lack not only initial ia, but also final ia.

From Table 3, we see that there are still 34 sentences which have definite referents and lack initial ia. Of these sentences, however, 15 do employ final ia, generally serving to mark off N + parenthetical from the ongoing sentence. Further, in these sentences, the parenthetical expression itself is often minimal—consisting, e.g., of a verb alone (with or without pronoun copy):

(65) Em MAMA bilong tupela [EM idai ia] EM swim swim istap (Paul T.) ‘The MOTHER of the two [WHO had died], she kept on swimming.’

(66) Nogat, MAN [isindaun ia] MITUPELA stori (Tony T.) ‘No, the MAN [who is sitting] HE and I are telling stories.’

But what of the 19 sentences so far unaccounted for, in which no ia-bracketing is used, though referents of N’s are definite? Six of these are unmarked cleft sentences, discussed above. The remaining 13 include every syntactic type of relatives, with the coreferential NP acting as subject in both the matrix and the embedded sentence, as in 67; as subject of the matrix sentence and complement of the embedded sentence, as in 68; as complement in the matrix sentence and subject in the embedded sentence, as in 69; or as complement in both, as in 70:

(67) Na MIPELA [ikam long Lae], MIPELA igo (Noemi S.) ‘And THOSE OF US [WHO had come to Lae], WE left.’

(68) Na narapela LAPUN [EM yu lukim], EM iHolzknecht (Alice W.) ‘And the other OLD MAN [THAT you saw], HE was Holzknecht.’

(69) Lucy, yu kirap igo lukim SISIS bilong mama [istap long dro bilong masin] (Emma M.) ‘Lucy, go get Mommy’s SCISSORS [WHICH are in the machine drawer].’

(70) Ol itok, wetim dispela, wonem, RIPOT [ol ikusim igo nau ating bai ol iputim we long …] (Tom S.) ‘They said they’d wait for this, uh, REPORT [THAT they took and that maybe they were going to put somewhere …]’

This group of sentences provides evidence that the ia-bracketing rule has not been completely generalized as yet (see the historical discussion in §9), and remains to some extent variable or optional in the population under study. The 13 sentences in question come from nine different speakers, all but one of whom used ia-bracketing in other sentences.

A last possible constraint on ia-bracketing which we investigated is social; i.e., we wondered whether particular speakers or groups of speakers tend to use ia-bracketing with greater frequency than others. The 112 sentences we examined are uttered by 26 speakers, the number of sentences from any single speaker varying

29 Preposed em here would appear to constitute a counter-example to our claim, in §1, about lack of evidence for a pronoun-attraction principle. Object preposing is, however, a stylistic variant not specific to relative clauses.
between one and 15. The relatively low number of sentences per speaker (a problem endemic to studies of variability in syntax) makes it difficult to discern differences among speakers; however, most display variable usage, alternating among the various possibilities we have discussed (double ia, initial ia only, final ia only, no ia). Only one speaker (Tony T.) has an inordinately high ratio of sentences unmarked by ia (8 out of 11, with one each of the other three types), but four of the eight unmarked sentences are indefiners. Grouping the speakers in various ways, we found a slight tendency for women to use ia-bracketing more frequently than men (72% vs. 56%), and for children to use it more than adults (75% vs. 60%). We would not claim that these differences are significant, given the sampling error inherent in having relatively few sentences per speaker, and we find it remarkable that speakers behaved so similarly.

To return briefly to an issue raised in §1, regarding the interaction between ia-bracketing and Equi-NP Deletion, it would at first glance appear that ia-bracketing acts as a constraint on the alternation between deletion and pronominalization of the coreferential NP. Of the 40 sentences in Table 1 in which ia-bracketing is not used, 80% delete the pronoun, as opposed to only 60% of the 72 sentences in which some form of ia-bracketing is employed. This, however, is entirely due to the presence of the 21 indefinites in the 'unmarked' category, since deletion is almost categorical in these sentences, only one of them retaining a coreferential pronoun in the embedded sentence. Of the 19 remaining unmarked sentences, 63% delete the pronoun; i.e., deletion occurs with the same frequency as in the ia-bracketed sentences.

9. THE PUTATIVE ORIGINS OF ia AS A RELATIVIZER; IMPLICATIONS FOR CREOLIZATION. It is fairly clear that ia has not been used as a relativizer throughout the history of Tok Pisin. It is definitely not so used in the earliest source in which we searched for examples of relatives, Churchill's account of Beach-La-Mar (1911). Beach-La-Mar was a western Pacific trade pidgin of the 19th century, the ancestor of the language still called Bichelamar (Guy 1974) or Bislama (Camden 1975), currently spoken in the New Hebrides. Tok Pisin is also considered to have its roots in Beach-La-Mar (Salisbury 1967, Laycock 1970b); and indeed the bulk of Churchill's data comes from New Guinea, culled from a dozen or so publications published around the turn of the century.

The four clear examples of relative clauses which we have been able to extract from Churchill are not syntactically marked, except for an Equi-NP Deletion rule. They are presented below, preserving Churchill's highly anglicized spelling (bracketing and glosses represent our analysis):

(71) He look out all men [stop this place] (Churchill, 50; originally from Wawn 1893:386) 'He looked for the people [who lived (t)here].'
(72) Some place [me go] man he no good (Churchill, 48; originally from London 1909:361) 'Some places I went the people were bad.'
(73) You savez two white men [stop Matupi] he got house (Churchill, 42, originally from Wawn, 290) 'You know that the two white men [who live at Matupi] have a house.'
(74) Chief he old man [he no savey walk good] (Churchill, 49, originally from Wawn, 143) 'The chief is an old man [who can't walk properly].'
Sentence 74 in particular might lead one to suspect the non-application of Equi-NP Deletion to explain the presence of the second he, or indeed to interpret this sentence as two coordinate clauses without a conjunction—i.e., ‘The chief is an old man, he can’t walk properly.’ However, we believe that the correct interpretation is that he (present-day i-) was already functioning as a ‘predicate marker’, not a pronoun, as appears to be the case in 72, man he no good.

Thus relativization in this early period seems to have involved no markers in the matrix sentence, and an equi-NP deletion rule in the embedded sentence. Hearers probably deduced the embeddedness from word order and juxtaposition of elements alone, with perhaps some help from prosodic features like stress and intonation. Moreover, the relatives observable in citations and texts published in Hall 1943 (recorded by various anthropologists during the 1930’s), as well as those in Wurm 1971, Laycock 1970a, and Mihalic 1971 (recorded during the 1950’s and 60’s), show virtually nothing but this pattern (apart from time and place relatives, discussed in fn. 23). The only clear exceptions are five sentences drawn from Hall’s copious texts, collected in the Sepik area during the 1930’s. They constitute a small minority of all the relatives observable in Hall’s texts; but they demonstrate the same structure exhibited by the sentences we have been analysing, in that four of them (one of which is given as 75) use initial ia, and one uses final ia (none use both initial and final ia). We regularize Hall’s transcription slightly, add brackets and underlining, and quote his English gloss:

(75) Tufela i-fainim MUN hir, [i-stap long sospen] (Hall 1943:46) ‘They found the MOON here, [WHICH was in the kettle].’

Interestingly, Hall glosses hir as ‘here’, but treats the following material as a relative.

Since examination of available texts leads us to believe that relatives were largely unmarked with ia until fairly recently, we have attempted to investigate how ia was used in these earlier texts. The earliest source (Queensland) contains no ia at all; but Churchill (p. 43) has one sentence, corresponding to the ‘place adverb’ usage mentioned by Laycock, Wurm, and Mihalic (cited in §4):

(76) Here no kaikai (from Seligmann 1910:10) ‘There is no food here.’

Texts cited by Hall dating from 20 or 30 years later, however, contain several examples of deictic ia, two of which are quoted (with his glosses) as follows:

(77) Oi i-go nau, em TUFELA PIKININI hir, TUFELA i-go lukautim banana i-mau (Hall, 46) ‘When they had gone, these two children both went to look for ripe bananas.’

(78) Na disfela MERI, [doktor i-kisim], disfela namberwan MERI bilong em hir, i-pikinini bilong luluai (Hall, 56) ‘Now this woman, [whom the doctor took], this number-one wife of his, was the luluai’s daughter.’

Sentence 78 in particular is noteworthy because the relative ‘whom the doctor took’ is unmarked (as appears to be typical), whereas hir is deictic. In both 77 and 78, Hall glosses hir as ‘this, these’, though he does not recognize this function in his grammatical discussion, and lists hir simply as an ‘adverb’ (100). Deictic or
demonstrative \( ia \) is also attested in the texts and examples cited by Wurm, Laycock 1970a, and Mihalic 1957, 1971.

Our reconstruction follows simply from this historical account. That is, we propose three stages: (1) the original ‘place adverb’ \( ia \); (2) extension for use as a postposed deictic or demonstrative; and (3) further extension for general ‘bracketing’ use, including topic-comment structures, relativization, and cleft sentences. That these uses are semantically and functionally related has been shown in §§4–8.

We can now relate this development to the creolization process. First, we know that the existence of creole speakers of Tok Pisin in any significant numbers can be dated no earlier than the mid-1950’s; and we have five clear cases of \( ia \)-marked relatives attested from more than a decade earlier. Certainly there is no reason why fluent second-language speakers of Tok Pisin could not have made the transfer between stages 2 and 3 in the use of \( ia \). That they indeed did so is confirmed by the adults in our sample, who have this usage well established in their speech and have not learned it from their children.\(^3\) This is particularly likely not only because of the semantic and functional relationships among the three usages, but also because many Austronesian languages of the New Guinea and island Melanesian area show striking parallels.

Thus, in Buang,\(^3\) the deictic particle \( ken \) is used as a place adverbial, e.g. \( ke \ mdo \ ken \) ‘I’m staying here’; as a postposed demonstrative, e.g. \( ke \ mdo \ byay \ ken \) ‘I’m staying in this house’; and as a relativizer, e.g. \( ke \ mdo \ byay \ ken \ gu \ le \ vk \) ‘I’m staying in the house that you saw yesterday’. Ray 1926 provides some evidence for similar structures in a number of island Melanesian languages, including Iai (p. 89), Nguna (208), Tasiko (237), Uripiv (286), and Tangoa (360). As for Tok Pisin’s contemporary ‘sister’ languages, Bislama appears to use \( ia \) as a postposed deictic marker, sometimes in conjunction with its relativizer \( we \) (cf. Camden and fn. 11 above); and in the Solomon Islands, \( ia \) has been described as a ‘particle which refers back to, e.g. \( desfala \ man \ ia \)’ (SICA, n.d., p. 13).\(^3\)

\(^3\) Some of the young adults in our sample had no children older than infants. We do not, of course, mean to imply that children’s most important input to language learning comes from their parents (or vice versa, in a creolizing situation!) We believe that the creolization process can shed much light on various problems of language universals (cf. Traugott 1973, Slobin 1975), though we do not agree with Bickerton’s assertion (1974:127) that this view necessarily implies that ‘adults have readier access than children to linguistic universals.’ Taking a somewhat wider view of linguistic universals than simply how linguistic universals may relate to ‘specific neural properties of the human brain’ (Bickerton, 135), we also feel it important to understand how linguistic means are shaped by their situation within, and relation to, the communicative patterns of human societies (cf. Hymes 1971). We therefore agree with Bickerton that close study of the particular social circumstances of both pidginization and creolization is necessary for the solution of these problems. (Cf. Sankoff, mss a, b, for further analysis of the social and historical situation of Tok Pisin in New Guinea.)

\(^3\) Buang is an Austronesian language spoken in the Morobe District south of Lae, and studied by Sankoff. Bruce Hooley, who has done extensive research on another dialect of Buang (where the cognate for \( ken \) is \( sen \)) has confirmed these examples. Hooley (personal communication) has correctly pointed out that Buang relatives usually, but not invariably, have a closing particle other than \( ken \) (or \( sen \)), one of a set of deictic forms.

\(^3\) We thank Aletta Biersack for bringing this to our attention.
Whether fluent, adult, second-language Tok Pisin speakers initially extended deictic *ia* for 'bracketing' use in complex sentences as a 'logical' outgrowth of its focusing functions, or whether some of them at least were influenced by grammatical parallels in their first languages, it is fairly clear that we should attribute the source or origin of this construction to adults. But it is also clear that the rapid spread of the *ia*-bracketing rule (i.e. its regular use in a majority of relatives) is a recent phenomenon, characteristic of that community which uses Tok Pisin as its primary language, including both 'pidgin' and 'creole' speakers.

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