Tense, Aspect, and Mood in Avatime

Rebecca Defina

Max Planck Institute for Psycholinguistics &

International Max Planck Research School for Language Sciences,

Nijmegen, The Netherlands

Abstract

The Ghana-Togo Mountain languages are a typologically distinct group of languages within the Kwa branch of the Niger-Congo language family. Until recently, they have received very little documentary attention, and are still greatly under-described. Where there is information regarding the tense, aspect, and mood system, Ghana-Togo Mountain languages are described as tense and aspect prominent. In contrast, Kwa languages are typically aspect and mood prominent, with little to no grammatical tense marking. Is the apparent greater emphasis on tense one of the typological features that separates the Ghana-Togo Mountain languages from the other Kwa languages? Or has tense been overrepresented due to the lack of description?

In the case of Avatime, it is the latter. Previous accounts have described Avatime with a strong focus on tense. However, when the semantics are considered in more detail, we see that none of the forms contains an inherent specification for tense. While there is often a default interpretation in the past, present or future, this default can easily be overridden. Thus, Avatime has a typical Kwa system with a focus on aspect and mood and no grammatical tense.

1   Introduction

Different languages place more focus on some types of temporal information than others in their grammatical systems (Comrie 1976; Bhatt 1999). Many European languages, for instance, tend to place more emphasis on tense than aspect (Bhatt 1999). Kwa languages, in contrast, tend to place more emphasis on aspect and mood than tense (Ameka & Kropp Dakubu 2008). Most Kwa languages, in fact, have no grammatical tenses, relying instead on adjuncts or pragmatic context to determine temporal location. If a Kwa language does have a grammatical tense distinction, it tends to be based on the opposition of future with non-future rather than the more generally common past vs. non-past opposition.

The Ghana-Togo Mountain (GTM) languages are a geographical-typological group of 14 languages spoken in eastern Ghana, Togo, and western Benin. They were originally grouped

together by Bernhard Struck (1912), based on the presence of elaborate noun class systems not observed in other languages of the region. Heine (1968) performed the only comparative study to date and classified the GTM languages into two subgroups (Na and Ka) within the Kwa subgroup of Niger-Congo. Since then there has been a large amount of data collected, which indicates that there may be more variability within the GTM languages than previously thought and that finding a way to connect them, as a whole, to Kwa may be problematic. This has lead Blench (2001; 2009) to suggest that they would be better analysed as a typological group consisting of four genetic clusters descending straight from proto-Kwa. It is clear that the middle layer of classification is unresolved and a new comparative study is needed to determine how the particular GTM languages cluster together under the general Kwa umbrella. For the purposes of this paper, I will maintain the distinction between the Na and Ka subgroups, but leave undecided their exact relation to each other and other Kwa groupings.

There is not much descriptive work on GTM languages currently available. However, where the tense, aspect and mood (TAM) system has been described, it has been done so with grammatical tense: Anii (Morton 2012); Avatime (Ford 1971a; Funke 1909; Seidel 1898); Lelemi (Allan 1973); Likpe (Ameka 2002); Logba (Dorvlo 2008); Siwu (Dingemanse 2011); Tuwuli (Harley 2008). The described tense systems of GTM languages usually have the typical Kwa primary distinction between future and non-future tense, though the systems tend to be more elaborate than is common for other Kwa languages.

Avatime is one of the better documented GTM languages. Its TAM system has been mentioned in the reports of three researchers: Seidel (1898), Funke (1909) and Ford (1971a). All three describe the language with grammatical tense. Their descriptions of particular forms are quite similar; however, looking at the system as a whole, their descriptions appear quite different. See Table 1 for an outline of the different descriptions.

Seidel (1898) was the first to describe the TAM system of Avatime. He presents Avatime as a tense-based language with a past tense; two present tenses, with no clear semantic distinction; two future tenses, one of which may also be an optative mood; and an imperative.

Funke (1909) presents a picture which more closely resembles the Kwa language norm. He describes Avatime with a stronger focus on aspect and mood than tense and with a primary tense distinction between future and non-future. The categories he proposes are: aorist; habitual (both future and non-future); future; intentional; imperative; and prohibitive.

Ford (1971a) gives the most detailed and elaborated description. His description is again largely tense-based, but also with a strong aspectual dimension. He proposes a perfective

aspect, with a three-way tense distinction: non-future, imminent future, and future; a progressive aspect, also with a three-way tense distinction: past, present, and future; a present habitual; and an imperative.

Table 1: Outline of proposed TAM categories

Seidel (1898)	Funke (1909)	Ford (1971a)	Current
Present (unmarked)	Aorist (unmarked)	Perfective[1] (Set 1[2], unmarked)	Aorist (Set 1[6], unmarked)
Past (*a-*)	N/A	N/A	(not found)
N/A	N/A	Present Progressive (*Ĕ-*)	Progressive (Set 1, *Ĕ-*)
N/A	Habitual (Set 3, *ze-*)	Present Habitual (Set 3, *zĔ-*)	Habitual (Set 3, *zĔ-*)
N/A	N/A	Past Progressive (Set 1, *zĔ-*)	Recurrent (*zŎ/Ĕ-*)
N/A	Future Habitual (*âze-*)	Future Progressive (*âzŎ-*)	Analysed as Potential + Recurrent
Optative/ Future (*ia-*)	Future (*â-*)	Future (*â-*)	Potential (*â-*)
Future (*ba-*)	Intentional (*trá-*)	Imminent Future (*trá-*)	Intentive (*tá-*)
Second Present (*i-*)	N/A	N/A	Subjunctive (Set 2 or 3, unmarked)
Imperative (no agreement, unmarked)	Imperative (no agreement, unmarked)	Imperative (no agreement, unmarked)	Imperative (no agreement, unmarked)
N/A	Prohibitive (*ki-*)	N/A	Prohibitive (Subjunctive +

			$k\acute{U}$-)

None of the previous studies describe the semantics or usage of the forms in much detail. The present paper provides a more detailed description of these forms and their uses. This shows that while many of these forms have a default temporal reference, this is only a pragmatic default interpretation and not an inherent specification for tense.

2 Background

2.1 Avatime

Avatime is spoken by approximately 20,000[3] people in eight villages north of Ho, in the Volta region of Ghana. Heine (1968) classified it as part of the Ka subgroup of GTM and it is unquestionably closely related to the other GTM languages Nyangbo and Tafi. Avatime is the term used in the local lingua-franca, Ewe. Two indigenous terms are also in use: *Sịya(sɛ)*, literally '(the) language'; and *Sịdɛmɛ(sɛ)*, based on *kèdamɛ*, the term for the Avatime land. Each village has its own dialect, with lexical, phonological and morphological differences. Previous work has focused on the dialect spoken in Amedzofe. The current work focuses on the dialect spoken in the neighboring village, Vane. Some investigation of other dialects was also done, and differences between the dialects will be discussed when the information is known and relevant. In particular, this cross-dialectal study showed that while there are some phonological differences between the aspect and mood markers across the dialects, there are no obvious semantic differences.

Avatime has nine vowels /i, ɪ <ị>, e, ɛ, a, o, ɔ, u, ʊ <ụ>/. There is an active system of vowel harmony where vowels in affixes take on the advanced tongue root (ATR) value of the stem. Historically there was also a +ATR variant of /a/ and the loss of this form has resulted in a few idiosyncrasies in the system. So *e* may either alternate with *ɛ* or *a* depending on the position in the word and the particular morpheme. ATR pairs will be referred to here since it is not possible to determine an underlying form for affixes. *I* refers to the pair *i, ị*; *E* to *e, ɛ*; *A* to *e, a*; *O* to *o, ɔ;* and *U* to *u, ụ*. In most cases, *a* does not alternate.

Sequences of vowels are generally disfavoured. This preference is particularly strong in some dialects of Avatime, such as the Amedzofe dialect (Schuh 1995). In the Vane dialect the preference against vowel sequences is not so strong. Adjacent vowels do often merge,

particularly in fast speech, but they are also frequently pronounced separately. It is even common for consonants between vowels to be elided, thus creating a surface vowel sequence.

Avatime has three contrastive level tones: extra-high (marked ´), high (unmarked) and low (marked `), for example *tsyí* 'turn', *tsyi* 'pour', *tsyì* 'tear', *sì-yà* 'language' and *sị-yà* 'hair'. The extra high tone has a restricted distribution, most frequently resulting from processes of tone raising. There is also a contour rising tone, for example *lě* 'then' and *zě-* 'habitual'. Falling contour tones only occur across two vowels, for example *tráà* 'come' and *áà-sɛ* 'he will leave'. In fast speech, contour tones are often produced as a flat high tone.

Like many other GTM languages, Avatime is a noun class language. There are six noun classes consisting of a singular and plural pair plus one mass noun class. Noun classes are indicated by an obligatory noun class prefix on the noun root. Loan words take agreement markers from Class 1, but don't generally take a noun class prefix. No fewer than five different numbering systems have been used for the noun classes in previous work on Avatime (Ford 1971a, 1971b; Funke 1909; Heine 1968; Kropp Dakubu & Ford 1988). The present work uses the numbering system based on Heine's (1968, 2008) comparison of noun classes across the GTM languages.

Verbs in Avatime are marked with a subject agreement prefix and one of a contrastive set of aspect and mood categories: aorist, progressive, habitual, potential, subjunctive, and imperative. Verbs can additionally be marked by two optional aspect/mood categories: the recurrent and the intentive. These occur in different slots on the verb and can be combined with the contrastive aspect/mood markers and each other. Negation is typically marked by a floating extra-high tone that attaches to the subject agreement prefix. When negating the subjunctive and imperative, a special prohibitive form is used instead of the standard negative. It is also possible to mark the verb with a directional marker (itive or ventive) and a comitative marker. There are no examples with both a directional and a prohibitive so it is not yet possible to determine their relative positions. The structure of the full Avatime verb complex is shown in (1). Example (2) shows an almost fully saturated verb, only the contrastive aspect/mood slot is unfilled here since the aorist is unmarked.

1. Subject Agreement - (Negative) - (Aspect/Mood) - (Intentive) - (Recurrent) - (Directional)/(Prohibitive) - Root - (Comitative)

2. *mɔ́-tá-zě-zě-pa-nì*   *wɔ*

    1S:NEG-INT-REC-IT-talk-COM   2S

    'I will not be going to talk with you.'

There is a group of verbs—copulas and positionals—which only occur in the aorist. These are the locative copula *lɪ́* 'be at', the equative copula *nu* 'be' and the positional verbs *dí* 'sit', *kpàsɪ̣* 'be in', *lɛ* 'stand', *tɪ̀nɪ̣* 'be on', and *sṵnṵ* 'hang'. In all other aspect and mood categories these verbs are replaced by a general copula verb *zè*. Ewe has a similar distinction between a present and past form of the 'be at' copula *le/nɔ* (Ameka 2008). The Avatime pattern differs from the Ewe in that the *zè* copula is used to replace many verbs and the suppletion is based mainly on aspect rather than tense. The *zè* verb is used to refer to present situations if they are not in the aorist, for instance (3). Also, with the exception of *lɪ́* 'be at' which seems to have a present tense specification, all the verbs which it replaces can be used to refer to past situations, for instance (4).

3. *èé-zè*   *ní*   *Ɔ̀vanɔ̀*

    C_1S:PROG-be   LOC   Vane

    'He is still in Vane.

4. *kù-ni-ɔ̀*   *kṵ-kpàsi*   *ní*   *ɔ-kpɪ̀kpɪ̀-yɛ*

    C_5S-water-DEF C_5S-be.in LOC C_1S-black-DEF

    'There was water in the black one (bucket).'

    (Description of Tempest video clip_SO)

There are three sets of subject agreement markers (Table 2). The set used depends on the aspect or mood category and the particular verb. Set 1 is generally used in the positive aorist, progressive, and potential. Set 2 is used for negatives, for the subjunctive of some verbs, and the aorist of positional and copula verbs. Set 3 is used in the habitual and for the subjunctive of some verbs. The tone depends on the tone of the noun class prefix and of the verb root. Looking at the table, it is possible to see the vestiges of a regular phonological change that

derived the different sets. However, there are currently too many exceptions to the rule to generalise a system here.

Table 2: Subject agreement markers

	Set 1	Set 2	Set 3
1 person singular	mA-	mO-	mI-
1 person plural	kI-	kU-	kI-
2 person singular	wO-	wO-	wU-
2 person plural	mlE-	mla-	mlI-
Class 1 singular	A-	O-	I-
Class 1 plural	bE-	ba-	bI-
Class 2 singular	E-	O-	I-
Class 2 plural	I-	I-	I-
Class 3 singular	lI-	lI-	lI-
Class 3 plural	E-	A-	I-
Class 4 singular	kI-	kI-	kI-
Class 4 plural	bI-	bI-	bI-
Class 5 singular	kE-	kU-	kI-
Class 5 plural	bE-	ba-	bI-
Class 6 singular	kE-	ka-	kI-
Class 6 plural	kI-	kU-	kI-
Class 7	sI-	sI-	sI-

Four situational aspect or Aktionsart classes can be distinguished in Avatime: Actions, Punctual events, Uni-directional changes, and States. Action is the basic event class and combines the traditional Vendlerian (1957) classes of activities and accomplishments. Avatime Actions get the typical in-progress interpretation in the progressive and a default past interpretation in the aorist. The Punctual event class contains events considered to have no duration, such as a light turning on or someone hitting something. These events have an

iterative interpretation in the progressive and cannot be modified by duration adverbs such as 'for 5 minutes' or 'quickly'. Uni-directional changes are state-change events which are considered irreversible, for instance dying or growing. These events get the in-progress interpretation in the progressive, but are interpreted as expressing a present end state in the aorist. States are predicates involving no change, such as being in a place or having a particular property. They can be placed in the progressive where they get a persistent state interpretation, for instance 'he is still in the house'.

2.2 The data

The present analysis is based on an 8.5 hour corpus collected during a four month field trip. This corpus is made up of a variety of material. It contains recordings of natural conversations between friends and family members, traditional stories, instructions for preparing meals or getting to particular places, and interviews about cultural practices and personal experiences. It also contains speech collected during experimental tasks. Four types of experimental stimuli were used:

1) The frog story picture book (Mayer 1969) was used to elicit stories from participants.

2) The route description task developed by Wilkins (1993) was used to elicit directions. Participants worked in pairs, each with identical model Lego towns. One participant was given a route through the town, which they had to explain to the other participant so that they could trace the same route through their own town.

3) A series of video clips based on the Tempest clips developed by Bohnemeyer (1998) were recorded in the field, acted out by myself and Saskia van Putten. The clips were shown in pairs via a PowerPoint presentation on a laptop to elicit descriptions of the differences between pairs of clips which differed only in the sequence of events.

4) A task I developed during the field trip was used in order to elicit descriptions of the order in which events occurred. This task involved two participants. One participant watched a short film on a laptop computer and the other was given several cards showing still images picturing events which occurred during the film. The task was for the second participant to arrange the cards in the correct order based on information obtained from the first participant who had seen the film. Two films were used during this task, the pear film (Chafe 1975) and the chicken film created by Givón for his 1991 study.

In addition to this 8.5 hour corpus the analysis is informed by data collected during targeted elicitation sessions. These sessions included the use of two translation questionnaires designed to probe TAM distinctions: the Dahl questionnaire (Dahl 1985) and the Progressive Aspect Questionnaire (Bertinetto, De Groot & Ebert 2000). All the findings based on this

elicited material were tested against the corpus of natural speech to ensure that they are not a product of the elicitation method and are not contradicted by speakers' natural usage.

The following conventions are used for citing examples. The source and speaker's initials are given in brackets following examples from the corpus. Elicited examples from the questionnaires are marked for the question and speaker. Other elicited examples are unmarked. All data, including the re-enacted Tempest clips, are available through The Language Archive (TLA) at the Max Planck Institute for Psycholinguistics and the Endangered Languages Archive (ELAR) at the School of Oriental and African Studies.

2.3 Theoretical background and terminology

The theory used for discussing tense and aspect distinctions in this paper is that of Klein (1994). Following Reichenbach (1947), Klein distinguishes three temporal reference points: the time of the utterance, the topic time, and the time of the situation. The utterance time is the deictic origin, this is usually the now point but can be shifted forward or backward, for instance in storytelling. The topic time is the time that the proposition relates to. The situation time is the time that the situation holds for. Tense is a deictic specification of temporal location indicating a relation between the speaker's temporal origin and the topic time. Aspect, on the other hand, indicates a relation between the topic time and the time of the situation. It contains no information relating the event to the speaker's temporal origin and so is not a deictic category. For example, in 'when the phone rang, Egbert was reading the book', the situation time is the whole time that Egbert was reading the book, which could be one minute or several hours, the topic time is the time that the phone rang and the speaker's temporal origin is most likely the time of speech. The past tense in 'was' indicates that the phone rang prior to the time of speech, i.e. the topic time is prior to the temporal origin. The progressive aspect in 'be reading' indicates that the topic time is contained within the situation time, so the phone rang during the time that Egbert was reading the book. The past tense itself does not provide any information about the situation time. Note that if we keep the tense constant and change the aspect, as in 'when the phone rang, Egbert had read the book', the situation time is prior to the topic time and the temporal origin. Conversely, the progressive aspect provides no information about the temporal origin; it does not tell us whether the reading occurred prior to the speech time or if it is yet to occur.

While in theory this draws a clear distinction between tense and aspect, in practice it can at times be difficult to determine whether a form contains deictic information as part of its core meaning, or whether this information is inferred from context. In these cases the following principles are used to decide on a preferred analysis: Analyses which attribute one

and only one meaning to each form are preferred. Where that is not possible, analyses where all the meanings of a single form are related by general principles are preferred, in line with the monosemy bias of Ruhl (1989:4). All else being equal, the simplest explanation for the available data is taken to be the correct one.

Mood and modality are notoriously difficult categories to define (Bybee, Perkins & Pagliuca 1994; Nuyts 2005). In the present paper, Palmer's (2001:1) characterisation of modal notions as those which are "concerned with the status of the proposition that describes the event" is used. The distinction between mood and modality is taken to be purely one of encoding, where moods are grammatically marked modal notions and modalities are optional non-grammatical markings of the same notions (de Haan 2005).

3   Aspect

3.1 Aorist

In the aorist, the verb takes subject agreement prefixes from Set 1, unless it is a copula or positional verb, in which case it takes Set 2 agreement forms. The verb is otherwise unmarked. This unmarked form of the verb was previously described by Seidel (1898) as a present tense but Ford (1971a) and Funke (1909) agree on a perfective-type semantics.

The aorist is by far the most common aspect in the corpus, occurring in 70% of clauses. It is used to refer to completed actions (5), states (6), and abstract situations such as in procedural descriptions (7). It has a default deictic temporal reference which depends on the situational aspectual properties of the clause. Actions and Punctual events are by default interpreted as occurring prior to the time of speech, for instance the Action in (5). Uni-directional changes and States, on the other hand, are generally interpreted as states holding at the time of speech, for instance the State in (6). As shown below, this distribution of uses follows from a perfective semantics with no specification for tense. Such an unmarked perfective form is ubiquitous in the region and generally known as the aorist or factative (Déchaine 1991, 1992; Welmers 1973).

5. *me-dzì*   *tré*   *me*   *ke-pe-a*   *mè*

   1S-return   go:LOC   1S.POS   C$_6$S-house-DEF   in

   'I've gone back to my house.'

   (Route description task_AB&WO)

6. *lị-gba-tɔ*   *lị-lị́*   *lɔ*

C₃S-building-some   C₃S-be.at   there

'There is a house there.'

(Directions to speaker's house_ED)

7. *xɛ́*   *mà-kpɛ*   *kị̀-fụ̀-yɛ̀-ɛ*   *kɔ*   *mè-dzi*   *mɔ̀mɔ̀nyiɛ̀*

   when   1S-put   C₄S-fire-DEF-CM   then   1S-buy   k.o.fish

   kò   *mà-kpɛ*   *tòmatòs-ye*   *nì*   *à-kpa-là*

   then   1S-put   tomato-DEF   and   C₃P-fish-DEF

   'When I make the fire, then I buy stinking fish, then I put the tomatoes and the fish in.'

   (Recipe-okra soup_AB)

     The perfective aspect denotes situations as "an unanalysed whole, with a well-defined result or end-state" (Dahl 1985:78). Such a semantics explains both the default, and the ranges of possible, interpretations. The default past interpretation for Actions and Punctuals comes from the fact that actions presented as a whole are necessarily completed and thus typically situated in the past (Binnick 1991; Dahl 1985; Klein 1994). According to Smith (2008), events in the perfective cannot be interpreted as occurring in the present. This is because the perfective indicates that the situation includes the event boundaries and hence is bounded, and a bounded situation cannot be identified with the instantaneous present. Indeed there are no examples of Action or Punctual aorist sentences with present interpretations.

     Why then are Uni-directionals and States interpreted in the present? In the case of the Uni-directionals, the present interpretation is actually a past interpretation in disguise. The state change event is interpreted as having occurred in the past, however, since the change is irreversible, the end state is assumed to still hold. It is only in translation into English that we are forced to make a decision between framing the situation as a past change (e.g. 'he died') or a present end state (e.g. 'he is dead'). Avatime speakers tend to prefer translations that focus on the present end state, presumably because the present is generally more topical, but either translation is possible.

     The default present interpretation of States is slightly harder to explain, mainly due to the question of what it means for a State to be in the perfective aspect. It is not clear how a state would be viewed as "an unanalysed whole, with a well-defined result or end-state" (Dahl 1985:78). Several researchers have worried about this question and generally resolved it by treating perfective marked states as simple (non-perfective) states (Comrie 1976; Guéron

2008). A motivation for this solution can be seen when the question is examined using Klein's (1994) framework. According to Klein the perfective indicates that the post-state of the event is included in the topic time. Now as States do not involve change, their pre- and post-states are equivalent. Thus for States, the perfective simply indicates that the situation time overlaps with the topic time. Since the default topic time is the speaker's present, the default interpretation of an Avatime State in the aorist is in the present. Importantly, there are many cases where the topic time is prior to the speaker's present and here States in the aorist receive a past interpretation (8-9).

8. *ɔ-fɪ̣nɪ̣*   *ní*   *bi-dɔ̀mɛ*   *abà-ɛ*

   C$_1$S-lie   LOC   C$_4$P-thing on-CM
   'She was lying on the thing.'
   (Description of Tempest video_SO)

9. *lɛ̌*   *be-zé*   *lɔ-ɛ*

   and   C$_1$P-be   there-CM
   'And they dwelt there.'
   (History of the Avatime people_WO)

While there are a few examples of Action aorist sentences with future interpretations in the corpus (10-11), they are quite rare, and there are no examples of Punctual, Uni-directional or State aorist sentences with future interpretations. The possibility of future interpretations is predicted by the perfective semantics. The rarity of such interpretations is also predicted by the fact that the future is inherently more marked than the past due to its additional modal qualities. The preference against future interpreted aorist sentences is strengthened in Avatime by the existence of potential and intentive moods (Sections 4.1 & 4.4), which would normally be used when referring to future situations.

10. *ɔ̀-lagɔ-lɔ̀*   *ɛ-dɔ*   *gì*   *kɪ̣-tɔ*   *bɪ̣-dɔ̀mɛ* *pɔ́*   *te*

    C$_2$S-evening-DEF   C$_2$S-land   when 1P-cook   C$_4$P-thing finish like.this

    ma-kɔ̀   *ke-plikpa* *kò*   *ma-kpasì*

    1S-take   C$_6$S-book just   1S-learn

'In the evening, when we finish cooking, I will take my book and learn.'

(Interview-discussing what the speaker will do that night_KA&RE)

11. *ègé   wo-bù   sị̀   wo=fɔ̀-e   áà-bị̀tɛ   gì*

what   2S-think   COMP   2S.POS=older.brother-DEF   C₁S:POT-do   if

wó-dzí   yɛ   klɔ̀

2S:NEG-go:LOC   C₁S.POS   place

'What do you think your brother will do if you don't visit him?'

a-ŋwlị̀mị̀   létà   tsísi   mɛ

C₁S-write   letter   send   1S

'He will write me a letter.'

(Dahl Questionnaire-question 15_SO)

3.2 Progressive

The progressive is marked by the prefix *Ĕ-* and takes subject agreement markers from Set 1. The vowel of the subject agreement marker assimilates to that of the progressive marker, and the rising tone is distributed across the two vowels. This form behaves like a classic progressive marker. It is used to refer to situations which are ongoing at the topic time, which can be punctual (12-13) or, as is more common, covering a certain interval of time (14).

12. *ègé   Àfua   ɛ̀ɛ́-bị̀tɛ   àbláà*

what   Afua   C₁S:PROG-do   now

'What is Afua doing now?'

ɛ̀ɛ́-wà   a-xwɛ̀-na

C₁S:PROG-do   C₃P-work-DEF

'She is working.'

(Progressive Aspect Questionnaire-question 01_MM)

13. *lì-po-lè   kị́lɛ   gì   ɛ̀ɛ́-ŋwlị̀mị̀   letè*

C$_3$S-time-DEF that when   C$_1$S:PROG-write letter

ye=nèmi-yè   *e-tuku* *a-ba* *lě* *a-fɛ*   *yɛ*   *sʉɛ*

C$_1$S.POS=sibling-DEF C$_1$S-enter C$_1$S-come then C$_1$S-lie.down C$_1$S.POS side

'When she was writing the letter, her friend came in and lay beside her.'

(Description of Tempest video clip_WO)

14. *àbláà* *dzéni-è* *èé-dɔ*

  now rain-DEF C$_1$S:PROG-fall

  'It is raining (not right now but meaning that it is currently the rainy season)'

Ford (1971a) described three progressive forms in Avatime: past (*azĚ-*), present (*Ě-*) and future (*áàzǑ-*). There are two arguments against this proposal. The first is that the past and future forms are formally related both to each other and to the recurrent marker. The second is that none of these forms is restricted to past, present or future temporal reference. Ford's past and future forms are discussed in Section 3.4 on the recurrent. The rest of this section shows that Ford's present progressive is not restricted to present temporal reference and so should be treated as a simple progressive aspect.

There are many examples in the corpus where the progressive is used to refer to past situations (15-16). The variety in contexts suggests that it is better not to analyse the form with a particular tense specification. The progressive aspect indicates only that the situation is ongoing at the topic time. Though the topic time is generally the speaker's present, it does not have to be. In all cases where the progressive gets a past interpretation, the topic time is clearly prior to the speaker's present (the time when the events in the story occurred in example (15), and in the 1970s in example (16)). There are no examples of the progressive used to refer to future situations, but, as discussed in Section 3.1, such examples are likely to be very rare.

15. *klatsɛ* *èé-se*   *nì* *ka-dròwì-a* *ka-tsyè* *ke-chase* *yɛ*

  deer C$_1$S:PROG-run and C$_6$S-dog-DEF C$_6$S-also C$_6$S-chase C$_1$S

  'The deer was running and the dog also chased him.'

  (Frog story_K)

16. *small   small   houses   bèé-zè-e*

    small   small   houses   C$_1$P:PROG-be-CM

    'There were very small houses'

    (Story about what Vane was like in the past_AB)

3.3 Habitual

    The habitual is indicated by the prefix *zĚ-* and subject agreement markers from Set 3. It is used to refer to situations which are repeated frequently over an extended period of time and which may be considered to be usual or predictable (17-18), or to generic situations which are always true (19). The habitual does not include any reference to a particular time and is frequently used to refer to situations holding in the speaker's past (17) and present (18-20). Examples of future reference are again not found. The habitual is distinguished from the progressive by its reference to repeated instances of situations, in contrast to the progressive's reference to single situations.

17. *xé   bɛ-trɛ   ku-dè-o   ɔ-ŋwà   te*

    when   C$_1$P-go   C$_5$S-road-DEF   INF-weed   like.this

    bị-zě-pɔị   bị-dɔ̀mɛ   ŋà

    C$_1$P-HAB-roast   C$_4$P-thing eat

    'When they went to weed the road like that they used to roast food to eat.'

    (History of the Avatime people_WO)

18. *lị-xwɛ̀   wɔ́lí   wo=fò-e   ị-zě-wà   ní   ofis-yɛ̀*

    C$_3$S-work which 2S.POS=older.brother-DEF C$_1$S-HAB-do LOC   office-DEF

    'What work does your brother do in the office?'

    ị-zě-ŋwlịmì   letɛ̀-a

    C$_1$S-HAB-write   letter-P

    'He writes letters.'

    (Dahl Questionnaire-question 25_SO)

19. *é-zě-bemi*   *míáò*

    C$_2$P-HAB-cry   meow

    'They (cats) say meow

    (Dahl Questionnaire-question 74_SO)

20. *kɔ níté*   *kụ́-zě-wà*   *ì-nyɔ-nέ*   *yà*

    so how   1P-HAB-do C$_2$P-farm-DEF   here

    'So this is how we farm here.'

    (Description of local farming practices_SO)

3.4 Recurrent

The recurrent, like the habitual, is indicated by the prefix *zĚ-*. The two forms are also quite similar in their semantics. There are differences, however, in both their form and meaning which indicate that, while the two forms have likely come from the same origin, they have now diverged.

The form of the recurrent marker shows alternations, while the habitual does not. Young Avatime speakers up to around 20 years of age can interchange *lǏ-* with the recurrent *zĚ-* in all contexts. Older speakers, who still use the system of vowel prefixes on subsequent verbs in serial verb constructions, show an alternation between *zŎ-* and *zĚ-* that correlates with the serial verb construction vowel prefixes[4]. These patterns of alternations suggest that the recurrent developed fairly recently from a serial verb construction. The first verb was likely the general copula *zè* 'be', though now it seems that younger speakers are reanalyzing it as the locational copula, which alternates between *lị́* and *zè*. Presently, the recurrent is clearly a verbal prefix rather than the first verb is a serial verb construction as it participates in vowel harmony triggered by the verb root. The habitual is likely derived from the same origin but has been further grammaticalised. This tighter grammatical integration can be seen in the fact that its form does not alternate and that the habitual forms part of the contrastive aspect/mood set while the recurrent is still outside the system.

The recurrent marker, unlike the aspectual markers discussed above, can and indeed must co-occur with another aspect or mood category. The form of the subject agreement prefix is determined by which other aspect or mood is used. Most frequently, it occurs with the aorist or the potential (21-23). There are also some examples of it occurring with the progressive

16

(24), subjunctive (25), intentive (26) and imperative (27). Thus, there is evidence that it can co-occur with all aspects and moods except the habitual. There is no morphological reason why the habitual should not occur with the recurrent, unless their likely common origin prevents them from co-occurring. The similarity in meaning between the two forms makes the combination pragmatically unlikely though.

21. ɔ́-nɪ̀-ɛ   gì   a-zě-da   bɪ̰-dzya-ɛ̀
    C$_1$S-person-DEF REL   C$_1$S-REC-sell   C$_4$P-meat-DEF
    'the person who sells the meat'
    (Story about a dog_PA)

22. ma-zě-wà   a-xwɛ̀-na   ní   cocoa marketing board ní   Koforidua-ɛ
    1S-REC-do   C$_3$P-work-DEF   LOC   cocoa marketing board LOC Koforidua-CM
    'I was working at the cocoa marketing board in Koforidua.'
    (Personal history_AB)

23. tɔ   kɪ́à-zě-ba   ke-pe-à
    PURP[5] 1P:POT-REC-come   C$_6$S-house-DEF
    'We shall be coming home (often).'
    (Interview- discussing what two boys will do in the future_KA&RE)

24. lɪ̰-xwɛ̀   wɔ́lí Kofi   ɛ̀ɛ́-zě-wà   lɪ̰-pà-lɛ   lɪ̰-vlɛ-lɛ̀
    C$_3$S-work which Kofi   C$_1$S:PROG-REC-do   C$_3$S-Saturday-DEF C$_3$S-morning-DEF
    'What work does Kofi do every Saturday morning?'
    (Progressive Aspect Questionnaire-question 02_MM)

25. Kwami   yɛ   li-nu   sì   ɔ-zě-kɪ̰   ba-gà   bɪ̰-tɔ
    Kwami   C$_1$S C$_3$S-be COMP   C$_1$S.SBJV-REC-give C$_1$P-animal C$_4$P-some
    gì   ba-ŋà-ɛ
    REL   C$_1$P-eat-CM
    'Kwami must be giving animals something to eat.'
    (Progressive Aspect Questionnaire_ question 79_MM)

26. wɔ-kà   a-tá-zɛ̌-dzɔ   kị-bɔ-ɛ̀   kpɛ   kị́   wɔ

    2S-father   C$_1$S-INT-REC-collect   C$_4$S-money-DEF   put   give   2S

    'Your father will be contributing money for you.'

    (Conversation between family members_SO,ErA,VA&AA)

27. zɛ̌-bi   me   dzedze-là

    REC-ask   1S   another-DEF

    'Ask me more questions'

    (Interview- discussing future plans_KA&MO)

The recurrent is used to refer to situations which are ongoing or repeated over a certain interval of time. Thus it overlaps in usage with both the progressive and the habitual. The distinction between the habitual and the recurrent is that in the recurrent the repeated actions are not considered to be usual or predictable and the interval of time involved is generally shorter and more definite. For instance in example (28), the habitual is used to describe a regular occurrence while in (29) the recurrent is used to describe a short period of a few deviations from that norm.

28. li-wè   kákaa mị-zɛ̌-yɔ   ɔ̀-lịzatɔ̀-nɔ

    C$_3$S-day   every 1S-HAB-rise C$_2$S-dawn-DEF

    'I always get up at dawn.'

    (Dahl Questionnaire-question 71_SO)

29. ɔ̀-gle   lɔ-yà   gì   kpese mɔ́-zɛ̌-yɔ   ɔ̀-lịzatɔ̀-nɔ

    C$_2$S-week C$_2$S-this REL   start   1S:NEG-REC-rise   C$_2$S-dawn-DEF

    'I won't rise at dawn this week.'

    (Dahl Questionnaire-question 72(negated)_SO)

There are two principle influences on the use of the recurrent versus the progressive. The first is that the recurrent has a wider semantic range than the progressive, as it can be used to refer to sequences of repeated events without presenting them as a whole (29). So, if someone

wishes to refer to a sequence of repeated events which is not habitual, he or she will use the recurrent, as in (30). The second factor is that the recurrent can, and indeed must, occur with another aspect or mood marker. This gives it a greater range in that it can be used to give additional information while still conveying that the situation is ongoing. For instance, by using the recurrent with the aorist a speaker can convey both that the situation was ongoing and that it is completed[6] (31-32), or by using it with the potential they can indicate that the situation is both ongoing and potential (33). The fact that the recurrent must combine with other aspects and moods also reduces its applicability. If the speaker wishes to convey the situation as ongoing only, without any of these additional meanings, then he or she is obliged to use the progressive rather than the recurrent.

30. *lị-gɔ́* *lɛ́-lɔ̀* *gì* *li-za-ɛ* *Kofi* *a-zɛ̌-panị* *blɔ*

C_3S-year C_3S-that REL C_3S-pass-CM Kofi C_1S-REC-speak 1P

e-wè *ta-ta*

C_3P-day C_3P-three

'Last year Kofi visited (lit. spoke to) us three times.'

(Progressive Aspect Questionnaire-question 05_MM)

31. *mà-zɛ̌-ŋà* *i-klipo-le-e*

1S-REC-eat C_2P-witness-DEF-CM

'I functioned as a witness then.'

(Description of traditional Ablabe ritual_PA)

32. *ba* *petee* *ò-nùgu* *to-lé* *bɛ-zɛ̌-panị*

C_1P all C_2S-mouth C_2S-one:FOC C_1P-REC-talk

'They all spoke with one voice' (that was the way things used to be, but not any longer)

(Interview-discussing how things used to be in Vane_GE&MM)

33. *ègé* *wo-bù* *sị* *wo=nèmi-yè* *áà-zɔ̌-bìtɛ*

what 2S-think COMP 2S.POS=sibling-DEF C_1S:POT-REC-do

xɛ́ *ki-ku* *klɔ*

when 1P-arrive there

'What do you think your brother will be doing when we arrive?'

áà-zǒ-ŋwlịmì   *ke-plikpa*

C$_1$S:POT-REC-write   C$_6$S-book

'He will be writing a letter.'

(Dahl Questionnaire-question 17_AB)

4 Mood

4.1 Potential

The potential is indicated by the prefix *â-*. The vowel in the subject agreement marker[7]

assimilates to /a/ unless it is close (ị or ụ). The contour tone is spread across both vowels, so the first vowel is extra-high and the second is low. The potential is commonly used to refer to future situations and was previously described by Ford (1971a), Funke (1909) and Seidel (1898) as a future tense. The evidence described here, however, suggests that a potential mood analysis is more appropriate.

It has often been noted that the future is inherently both temporal and modal in nature (Comrie 1976; Dahl 1985; Bybee et al. 1994; Palmer 2001). By its very nature, a statement about a future event indicates no more than an assumption or belief that it will occur, though the degree of certainty that the speaker feels about the event taking place is variable. It is, therefore, very common for languages to use a future tense marker to indicate potentiality, or, conversely, a potential marker to refer to future situations. Thus, it can be difficult to determine whether a particular form is a future tense with modal uses or a potential mood used for future reference. In most cases this distinction can be drawn based on the particular distribution of uses, and one analysis will provide a simpler account of this distribution than the others. This is definitely the case for Avatime.

While most examples of future time reference make use of this marker, for instance in examples (34) and (35), there are also some cases where it is not used and the reference is clearly to a future situation, such as example (10), repeated here as (36). Hence, future time reference is not a sufficient motivation for the use of this marker. It is also far from a necessary condition, as 42% of the examples of this form in the corpus refer to non-future situations, for instance (37) and (38).

34. *kɔ xé gì   wo-dò   sùkúu-è   ègé   wáâ-bịtɛ*

so if COMP   2S-exit   school-DEF   what   2S:POT-do

'So if you finish school what will you do?'

(Interview-two boys discussing their plans for the future_KA&RE)

35. *yáà-do*   *ànùkwarɛ*

C₁S.LOG:POT-speak   truth

'He will tell the truth.'

(Story about a duck and a rabbit_SO: The narrator is telling how the rabbit is begging the duck not to drown him, saying that he will tell the truth about what he did with the duck's money.)

36. *ɔ̀-lagɔ-lɔ̀*   *ɛ-dɔ*   *gì*   *kị-tɔ*   *bị-dɔ̀mɛ*   *pɔ́*   *te*

C₂S-evening-DEF   C₂S-land   when   1P-cook   C₄P-thing   finish   like.this

ma-kɔ̀   *ke-plikpa*   *kò*   *mà-kpasị̀*

1S-take   C₆S-book   then   1S-learn

'In the evening, when we finish cooking, I will take my book and learn.'

(Interview-describing what he will do that night after school_KA&RE)

37. *ku-dè*   *wɔ́lí*   *wáà-gà*   *wáà-trɛ́*   *Kpeta-ɛ?*

C₅S-road   which   2S:POT-move   2S:POT-go:LOC   Kpeta-CM

'Which way does one pass to get to Kpeta?'

(Interview-asking for directions to Kpeta_SM&MM)

38. *dzɛ́ni-è*   *áà-dɔ́*   *Òholò*   *kivɔ̀e*

rain-DEF   C₁S:POT-land:LOC   Ho   yesterday

'It might have rained in Ho yesterday.'

A purely potential semantics is more suited to the data. All the examples in the corpus have a potential interpretation. Furthermore, you cannot have the potential meaning without the *â-* marker (39). Conversely, the future interpretation can be easily cancelled by an adverb that specifies the temporal location (40), leaving only the potential semantics.

39. *nyàfɛ   dzéni-è   a-dɔ   ní   Òholò kivòe*

    perhaps   rain-DEF C$_1$S-land LOC Ho   yesterday

    'It might have rained in Ho yesterday.'

40. a. *áà-trɛ   ní   Ịgɛ*

       C$_1$S:POT-go LOC Accra

       'He will go to Accra.'

    b. *áà-trɛ   ní   Ịgɛ   kivòe*

       C$_1$S:POT-go LOC   Accra yesterday

       'He might have gone to Accra yesterday.'

4.2 Subjunctive

    The subjunctive is indicated by the use of subject agreement forms from either Set 2 or 3, depending on the verb. There is no independent morpheme. In most cases each verb can only take either Set 2 or Set 3 subject agreement, but there are a few cases where a verb can take either form, such as *mɔ̀* 'see' and *tɔ* 'cook'.[8] The choice of subject agreement form appears to be lexically determined.

    The subjunctive is used primarily in subordinate clauses. It is mainly used in the sentential objects of the verbs *nu* 'be' and *pɛ* 'want' (41-43). With *pɛ* 'want', the subject of the subordinate clause must be the same as the subject of the main clause, otherwise the aorist will be used instead of the subjunctive (44). It is also used in subordinate clauses that express a reason or motivation for the main clause (45).

41. *li-nu   sì   mi-zè   ke-pe-à   kivò*

    C$_3$S-be   COMP   1S.SBJV-be C$_6$S-house-DEF tomorrow

    'I must be home tomorrow.'

42. *mà-pɛ   sị̀   mi-se*

    1S-want   COMP   1S.SBJV-run

    'I want to run.'

43. *wɔ̀-pɛ*   *wụ-trɛ*   *ní*   *amekúkúbɔ-ɛ*   *mɛ̀*

  2S-want   2S.SBJV-go   LOC   cemetery-DEF   in

  'You want to go to the cemetery.'

  (Directions to the cemetery_SO)

44. *mà-pɛ*   *sị̀*   *wɔ̀-se*

  1S-want   COMP   2S-run

  'I want you to run.'

45. *lĕ*   *e-mu*   *ku*   *ní*   *lì-fu-nè*   *sị̀*   *ị-gụ*

  then   C₁S-climb   arrive   LOC   C₃S-air-DEF   COMP   C₁S.SBJV-pluck

  'Then he climbed the tree in order to pick (them).'

  (Pear story_HO)

The subjunctive can also be used in main clauses. In that case, it is used to indicate that the speaker thinks the situation should hold and to make polite requests (46-49).

46. *ku-trɛ*

  1P.SBJV-go

  'We should go.'

  (Speech at a wake ceremony_WB)

47. *fɔmizi-è*   *o-mu*   *trɔ*   *ní*   *yɛ*   *kɛ̀-de-à*

  rabbit-DEF   C₁S.SBJV-climb   put   LOC   C₁S.POS   C₆S-back-DEF

  'The rabbit should climb onto his (the duck's) back'

  (Story about a duck and a rabbit_SO)

48. *mi-bù*   *bɛ*   *abà*   *sị̀*   *yɛ*

  1S.SBJV-think C_4P^9 on   tell   C₁S

  'Let me explain it to him.'

  (Description of traditional Ablabe rites_PA)

49. me mi-bi sì   kɔ kɪ́tὲ Avatime ɔ̀-mà-nɔ   mὲ

  1S 1S.SBJV-ask COMP so how Avatime C_2S-town-DEF in

  e-zὲ   tsãa?

  C_1S-be past

  'I want to ask, how was the Avatime state in the past?'

  (Interview _GE&MM)

This is a very typical pattern for a subjunctive marker (Palmer 2001). In general, we can see that in all examples of the subjunctive the predicate is not asserted by the speaker. This is similar to the potential, but the type of non-assertion differs. The subjunctive is used to present situations as desired or necessary, whereas the potential presents situations neutrally, simply as being possible. The only typologically unusual aspect of this subjunctive mood is the same subject requirement with the verb pɛ 'want'. It is not uncommon for subject choice to impact subjunctive usage. It is unusual, however, for the subjunctive to occur only where there is identity between the subjects regardless of the particular subject used. There is as yet no clear motivation for this restriction in Avatime.

4.3 Imperative

  The imperative is only used with the 2nd person singular. It is indicated by the bare verb without subject agreement (50). The imperative cannot co-occur with any of the contrastive aspects and moods: aorist, progressive, habitual, potential, and subjunctive, though it can co-occur with the optional aspect and mood categories such as the recurrent (51). This suggests that the imperative is among the set of contrastive aspect and mood categories, even though it is restricted to the 2nd person singular. If the speaker wishes to give a directive to more than one addressee or to the 3rd person, he or she must use the subjunctive (52).

50. ŋà bi̠-dɔ̀ ya

  eat C_4S-thing this

  'Eat this!'

51. zě-bi me dzedze-là

REC-ask   1S   another-DEF

'Ask me more things.'

(Interview- two school students were interviewing each other about their future

plans_KA&MO)

52. *mla-ŋà*   *bị-dɔ́*   *ya*

2P.SBJV-eat   C₄S-thing this

'Eat this! (to more than one person)'

4.4 Intentive

The intentive is marked by the prefix *tá-*. It is not part of the contrastive aspect and mood

set. Like the recurrent, it occurs optionally in a different slot on the verb. Its usage overlaps

with the potential mood, but there are some important differences.

This form corresponds to the form *trá-* in the dialect of the neighbouring village

Amedzofe, which Ford (1971a) described as an imminent future tense. However, this analysis

does not adequately describe its usage or the difference between this form and the potential *â-*

, since both forms are used for distant future situations (53-54) and for near future situations

(55-56). In fact, Funke's (1909) analysis as an intentional mood seems highly accurate,

though here it is referred to as an intentive, following Palmer's (2001) terminology.

53. *ègé*   *wɔ-tá-bịtɛ*   *xé*   *wo-tsì*

what   2S-INT-do   when   2S-grow

'What are you going to do when you grow up?'

(Interview- two school children discussing what they want to do when they grow

up_K&A)

54. *xé*   *gì*   *me-tsì-i*   *máà-dzi*   *lị-gba*   *bìdi-è*

when   when   1S-grow-CM   1S:POT-buy   C₃S-building   big-DEF

'When I grow old I will buy a big house.'

(Dahl Questionnaire-question 152_AB)

55. *kɔ ki-dò   sùkúu òmonò-e   ègé   wo-tá-bị̀tɛ*

so 1P-exit   school today-CM   what   2S-INT-do

'So if we close from school today what are you going to do?'

(Interview-two school children discussing what they will do that evening after school_KA&RE)

56. *kɔ xέ   gì   wo-dò   sùkúu-ɛ   ègé   wáà-bị̀tɛ*

so when   when   2S-exit   school-CM   what   2S:POT-do

'So if you close from school what will you do?'

(Interview-two school children discussing what they will do that evening after school_KA&RE)

There is a large overlap in the use of the potential and the *tá-* prefix. Both are used to refer to future situations (53-56) and when giving directions (57-58). When presented out of context, the default meaning for both forms is one of future reference and in these cases speakers report that the two forms are interchangeable. Some speakers, when pressed, report a slight difference in meaning between sentences differing only in these two forms, though they find it very difficult to express what exactly the difference is and they often contradict themselves.

57. *wɔ-tá-gà   ku-bià̀kpa-dè-o*

2S-INT-move   C$_5$S-Biakpa-road-DEF

'You take the Biakpa road'

(Directions_FO)

58. *wáà-gà   ku-bià̀kpa-dè-o*

2S:POT-move   C$_5$S-Biakpa-road-DEF

'You take the Biakpa road'

(Directions_GE)

There are, however, three clear differences in the usage of the intentive and potential. Firstly, the intentive cannot be used to indicate that the event may have already occurred,

26

while the potential can easily be interpreted in this way (59-60). Secondly, the intentive is only used with animate subjects, while the potential can be used with both animate and inanimate subjects. Finally, the interpretations of the intentive and potential in the past are different. The potential expresses simple possibility (60) and the intentive expresses past intention (61-62). Taken together, this evidence suggests that *tá-* means something like 'X intends to do Y'. This proposed semantics is confirmed by reexamining the corpus. The potential is in general more frequently used for describing future events, but when one looks at the subset of future desirable actions by animate agents, the intentive is the more frequent form.

59. **nyàfɛ   a-tá-se   kivòe*

    perhaps   C$_1$S-INT-run   yesterday

    'He might have run yesterday'

60. *(nyàfɛ)   Kofi   áà-se   kivòe*

    perhaps   Kofi   C$_1$S:POT-run yesterday

    'Kofi might have run yesterday'

61. *bɛ-tá-ŋà   dɔ*

    C$_1$P-INT-eat   thing

    'They were going to eat.'

    (History of the Avatime people_WO)

62. *bɛ-tá-ŋà   dɔ   pɔ   bá-ŋà   dɔ*

    C$_1$P-INT-eat thing but   C$_1$P:NEG-eat thing

    'They were going to eat, but they didn't'

5 Negative

All of the contrastive aspects can be negated through the use of a Set 2 subject agreement form in combination with a floating extra-high tone. This basic form can be seen in the unmarked aorist (63). In the other aspects, the negative is also often marked by a change in the overt aspect marker.

63. *ɔ́-mɔ̀*   *ɔ́-nì-ɛ*

   C₁S:NEG-see   C₁S-person-DEF

   'He didn't see the man.'

   (Pear story_HO)

In the negative progressive, the *ɛ̌-* marker is replaced by *lí-* (64-65). As can be seen in (65), this form is often used to express negative general states. This is in contrast to the positive progressive, which is only used to refer to situations that are currently ongoing (Section 3.2).

64. *mɔ́-lí-ŋà*   *blàlị*

   1S:NEG-NEG.PROG-eat   plantain

   'I am not eating plantain.'

65. *ɔ́-lí-tanị*   *gà*   *mɔ̀*

   C₁S:NEG-NEG.PROG-can   move   good

   'He cannot walk well.'

In the negative habitual, the *zɛ̌-* marker is removed, leaving only the tone. Since negation is also expressed by a floating extra high tone, this leaves three floating tones to be realised on the single vowel in the subject agreement marker. At most two tones can be realised on a vowel, so the initial extra-high is left out and we are left with a rising tone (66). The negative habitual is very rarely used; there are no examples of it in the corpus. As noted above the negative progressive seems to be extending to cover the negative habitual contexts.

66. *mɔ̌-tà*   *kị-mịmị*

   1S:NEG.HAB-eat   C₄S-rice

   'I don't usually eat rice.'

The potential mood has no direct negative counterpart. If a speaker wishes to express a situation that would normally be marked by the potential in the negative, he or she uses the

negative intentive, even if the intentive would not normally be used for that type of situation (67) (See Section 4.4). This gap in the paradigm is most likely due to the loss of the segmental part of the full negative marker *bí-* documented by Funke (1909) and Ford (1971a). According to Ford (1971a), this form is used in Amedzofe to negate the habitual and potential (68) though it has been lost in the aorist. In Vane, this form seems to have been lost entirely.[10] This loss means that there is no longer a distinction between the negative and positive potential, since the floating extra-high tone would be absorbed by the falling tone of the potential, and the change of subject agreement marker would also be invisible in most cases due to vowel coalescence. Given this situation, it seems logical that Vane speakers would extend the use of the negative intentive to cover situations that call for the negative potential.

67. *ɔ́-tá-bịtɛ*　　　　　 *pɔ́*

　　 C₁S:NEG-INT-do　　 finish

　　 'He might not have finished it.'

68. *ɔ̀-bí-â-bịtɛ*　　　　　 *bɛ*

　　 C₁S-NEG-POT-do　　 C₁P

　　 'He will not do it.'　　 (Ford 1971a: 201)

The imperative and the subjunctive are both negated by the same form *kÚ-* (69-70). The verb is in the subjunctive and the standard negative marker is not used. The term prohibitive is adopted here following Funke (1909), though he reported the form as *ki-* and found it only with plural subjects. The verb *bịtɛ* 'do' is irregular in the 2ⁿᵈ person singular where *wo-kú-* reduces to *ú-* (71).

69. *wɔ-kụ́-trɛ*　　　　　　 *ní*　　 *lị-gba-lɛ̀*

　　 2S.SBJV-PROH-go　　　 LOC　 C₃S-building-DEF

　　 'Don't go near the house.'

　　 (Route Description Task_AB&WO)

70. *áà-sị*　　　 *wɔ sị*　　　 *wụ-kụ́-kpɛ*　　　　 *yɛ*　　　 *ò-nùgu*

C₁S:POT-tell 2S COMP 2S.SBJV-PROH-put C₁S.POS C₂S-mouth

'He will tell you that you shouldn't worry him.'

(Interview_GE&MM)

71. *ú̠-bì̠tɛ*   *bị-dɛ́*   *lɔ̀*

    2S.SBJV.PROH-do   C₄S-thing   this

    'Don't do this thing.' (Meaning 'don't eat this')

The optional categories, intentive and recurrent, are negated according to the other aspect or mood marking used. In examples (72) and (73), the intentive and recurrent are used in the aorist, so negation is indicated by a Set 2 prefix with an extra-high tone. In example (74), the intentive is used in the progressive, so negation is indicated by *lị́* in addition to the Set 2 prefix with an extra-high tone.

72. *kù-ni*   *kú̠-tá-gà*   *blɔ*   *si*   *za*

    C₅S-water   C₅S:NEG-INT-move   1P   middle   pass

    'Water will not pass between us.'

    (Interview-discussing plans for the future_KA&RE)

73. *ò-gle*   *lɔ-yà*   *gì*   *kpese*   *mɔ́-zɛ̌-yɔ*   *ɔ̀-lị̠zatɔ̀-nɔ*

    C₂S-week   C₂S-this   REL   start   1S:NEG-REC-rise   C₂S-dawn-DEF

    'I won't rise at dawn this week.'

    (Dahl Questionnaire-question 72(negated)_SO)

74. *kù-ni*   *kú̠-lị́-tá-gà*   *za*

    C₅S-water   C₅S:NEG-NEG.PROG-INT-move   pass

    'Water will not be passing.'

6 Conclusion – Avatime in Context

Previous work on Avatime described the grammatical temporal system as largely tense based (Ford 1971a; Funke 1909; Seidel 1898). These descriptions were not very detailed, however. In particular, they provided limited information on the semantics and usage of the

particular forms mentioned. The current, more detailed analysis, paints a very different picture. There is no evidence for grammatical tense marking. Instead, the system is strongly aspect and mood focused. There is a set of six contrastive aspect and mood categories which fill a single slot on the verb. These contrastive categories are: aorist, progressive, habitual, potential, subjunctive, and imperative. There are two optional categories which are marked later in the verb complex: recurrent aspect and intentive mood. All aspects can be negated using a general negative marker. The subjunctive is negated using a different negative marker, called the prohibitive. The imperative and the potential have no direct negative counterparts. The imperative is negated using the negative subjunctive and the potential is negated using the negative aorist plus intentive.

Now that we have a more accurate picture of the Avatime TAM system, we can consider how it compares to that of its neighbours, both geographical and genetic. Unfortunately, information regarding the TAM systems of other GTM languages is still rather patchy. There is some information on six out of the thirteen other GTM languages: Anii (Morton 2012), Lelemi (Allan 1973), Likpe (Ameka 2002), Logba (Dorvlo 2008), Siwu (Dingemanse 2011) and Tuwuli (Harley 2008). All of these except Tuwuli belong to the Na group of GTM, whereas Avatime belongs to the other Ka group. Tuwuli and Logba are particularly interesting as comparisons for Avatime. Firstly, the TAM systems of both languages have been quite well documented, certainly in comparison to the other GTM languages. Secondly, they make an interesting geographical versus genetic comparison. Tuwuli is Avatime's closest relative for which we have tense, aspect, and mood information and it is spoken at some distance to Avatime. In contrast, Logba is more distantly related, yet it is spoken in an immediately adjacent region and Logba and Avatime speakers are in fairly frequent contact. There is much more information available on other Kwa languages, but here I will focus on Ewe due to its role as the regional lingua franca. I will briefly describe the TAM systems of Logba, Tuwuli and Ewe and then discuss how the Avatime TAM system compares to those of the other GTM and Kwa languages.

Logba has four preverbal morphological TAM markers: present progressive (lú-), past progressive (tù), habitual (tú-), and future (bá-/bɔ́-/bí-/bé-/á-). The future and present progressive can be combined to describe ongoing future events. Logba also has an unmarked aorist aspect. The bare verb is used for imperatives, to both singular and plural addressees. The imperative is negated by a prohibitive formed by prefixing *to* 'never' to the verb.

Tuwuli has a basic tense distinction between future (aà-) and non-future (unmarked) and a basic aspect distinction between imperfective (ka-) and perfective (unmarked). In addition to these basic distinctions, it has a present imperfective (á-), which cannot co-occur with either the future or the imperfective markers. There are also two subjunctive markers, imperfective (kaa-/aka-) and perfective (low tone). Finally, there is a periphrastic present progressive construction, which may have come into the language fairly recently through contact with Ewe. This new present progressive seems to be encroaching on the present imperfective and pushing it more towards a subjunctive. This shift is in turn narrowing the use of the subjunctive forms. Interestingly, Harley (2008) explicitly considers a tenseless analysis for Tuwuli but rejects it, largely because the future tense marker always has a future temporal reference and cannot be used to refer to possible situations.

Each verb in Ewe must be placed in one of four aspect/mood categories along a cline from realis to irrealis: aorist (unmarked), habitual (-(n)a), subjunctive (ná-), and potential ((l)a-). The bare verb is also used for indicating the imperative, which can be used with both singular and plural 2nd person as well as plural 1st person subjects. In addition to this set of obligatory contrastive categories, there are many optional categories marked either periphrastically or with a preverbal marker. I will not go into these here, for a detailed description see Ameka (2008).

Avatime, like the other GTM languages, tends to mark its TAM categories with prefixes. Though, interestingly, it seems that the intentive and recurrent were recently grammaticalized from serial verb constructions. In contrast, Ewe, like many other Kwa languages, has a more heterogeneous strategy, involving suffixes, prefixes, and various periphrastic constructions.

Avatime's aspect system is also much more similar to the aspect systems of other GTM languages than that of Ewe. In general, most GTM languages have an unmarked perfective, a marked imperfective or progressive, and a habitual. There is also often something similar to the Avatime recurrent, called the continuous in Lelemi and Siwu and the past progressive in Likpe and Logba. The Ewe aspect system, in contrast, doesn't have a primary perfective vs. imperfective aspect distinction. Instead, its main contrast is between the aorist and the habitual. Though there is an optional periphrastic construction for marking the progressive, it is one of many optional aspect forms and not part of the core contrastive system. Interestingly, Avatime and Logba have remarkably similar aspectual systems, even down to the formal similarity between the habitual and the recurrent/past progressive. The genetically closer Tuwuli system is comparatively quite different. It will be very interesting to contrast

Avatime with its closest genetic relations, Nyangbo and Tafi, when their descriptions become available.

The Avatime tense and mood systems, in contrast, diverge more from the GTM language norms and more strongly resemble Ewe and the other Kwa languages. The other GTM languages all distinguish a future tense and many of them also make a past vs. present distinction in at least one of their aspects (Likpe, Logba, Siwu & Tuwuli). The case for tense in Tuwuli is particularly strong, since it is the only example where the researcher explicitly argues against a modal interpretation. The other GTM systems also do not generally include any mood categories, other than a bare verb form used for the imperative. This might be a matter of limited description, but both Logba and Siwu have been quite well described and neither of those descriptions lists other mood categories. Ewe on the other hand has many mood distinctions, and just as in Avatime, there is a primary distinction made between potential and subjunctive in the core contrastive set.

Thus, further investigation of the Avatime tense, aspect, and mood system has shown that it fits more with the general Kwa language pattern of strong aspect and mood prominence than with the more tense and aspect prominent GTM language pattern. In contrast, the Avatime aspect system and general style of using preverbal affixes to mark TAM categories fits more with the GTM language trend than with the neighbouring non-GTM Kwa languages. Since GTM language description is still in its early stages, there are likely to be many changes as more data becomes available. At present, however, the lack of grammatical tense in Avatime appears to be unusual for a GTM language.

Abbreviations

1	1st person	LOG	logophoric
2	2nd person	NEG	negative
Cx	noun class	P	plural
CM	clause marker	POS	possessive
COM	comitative	POT	potential
COMP	complementizer	PROG	progressive
DEF	definite	PROH	prohibitive
HAB	habitual	PURP	purposive
INF	infinitive	REC	recurrent
INT	intentive	REL	relative clause marker
IT	itive	S	singular
LOC	locative	SBJV	subjunctive

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[1] Ford's description is not entirely clear here. At times he refers to this form as a past, perfective, present perfective, present, etc. His analysis seems clearest when it is interpreted as a perfective.

[2] Set 2 with copula and positional verbs.

[3] Recent census figures range from 7,511 in 2000 to 24, 000 in 2003. This estimate is based on time spent with the community. The most recent census data was not yet available at time of writing.

^{4} Ford (1971) noted the zǑ- form in the potential, but it also occurs in the second person singular. These are the two environments where the second verb in a serial verb construction would be marked with O-.

^{5} There are a several modal and aspectual particles in Avatime, such as this purposive particle. They are, however, outside the scope of the present paper.

^{6} One may ask what the distinction is between the aorist-recurrent and a past progressive. The aorist-recurrent gives a combination of ongoingness and completion which implies that the whole event occurred prior to the topic time and, as discussed in Section 3.1, this has a default interpretation of occurring in the speaker's past. However, according to this analysis, it should be possible to shift the temporal reference by shifting the topic time. This remains to be tested. There is another distinction between the two though and that is that a past-progressive should not require the situation to have been completed but the aorist-recurrent should. This was tested and indeed if the aorist-recurrent is used then the situation must be completed.

^{7} Due to the assimilation it is not clear whether the agreement markers come from Set 1 or Set 2 and in either case there would be four exceptions where the vowel clearly came from another set, so it is also possible that they come from some fourth set.

^{8} There is a slight tendency for transitive verbs to take Set 3 agreement and intransitive verbs to take Set 2. However, there are many exceptions to this, for instance *tè* 'know' and *panɩ̀* 'speak' are transitive but take Set 2 agreement and *zè* 'be' takes a PP complement and Set 3 agreement. A transitivity-based distinction also does not explain the interchangeability of agreement forms for *mɔ̀* 'see' and *tɔ* 'cook'.

^{9} Class 4 plural is used as a generic noun class when the speaker does not wish to specify the object.

^{10} There is one example where a woman from Vane uses an *í* in the negative aorist *o-í-tse* 'He didn't die' (Kadzidzia_QM). This may be a remnant of the full *bí* negative marker.