

Aspect and Modality in Avatime



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Aspect and Modality in Avatime
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For Theo

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List of Abbreviations Used

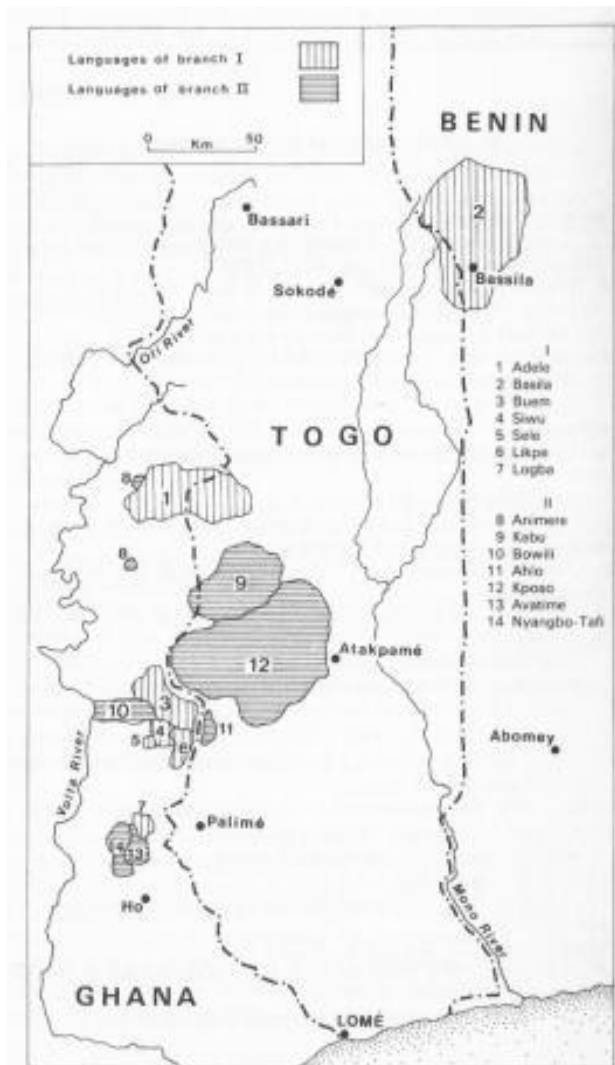
In the glosses:

1	1 st person
2	2 nd person
ATT	attenuative
C	noun class
CM	clause marker
COM	committative
COMP	complementizer
CONJ	conjunction
DEF	definite
EXCL	exclamative
HAB	habitual
IDEO	ideophone
INDEF	indefinite
INT	intensive
IT	itive
LOC	locative
LOG	logophoric
NEG	negative
P	plural
POT	potential
PROG	progressive
PROH	prohibitive
PROSP	prospective
QM	question marker
REC	recurrent
REDUP	reduplication
S	singular
SBJV	subjunctive
SVCV	serial verb construction vowel
VENT	ventive

In the text:

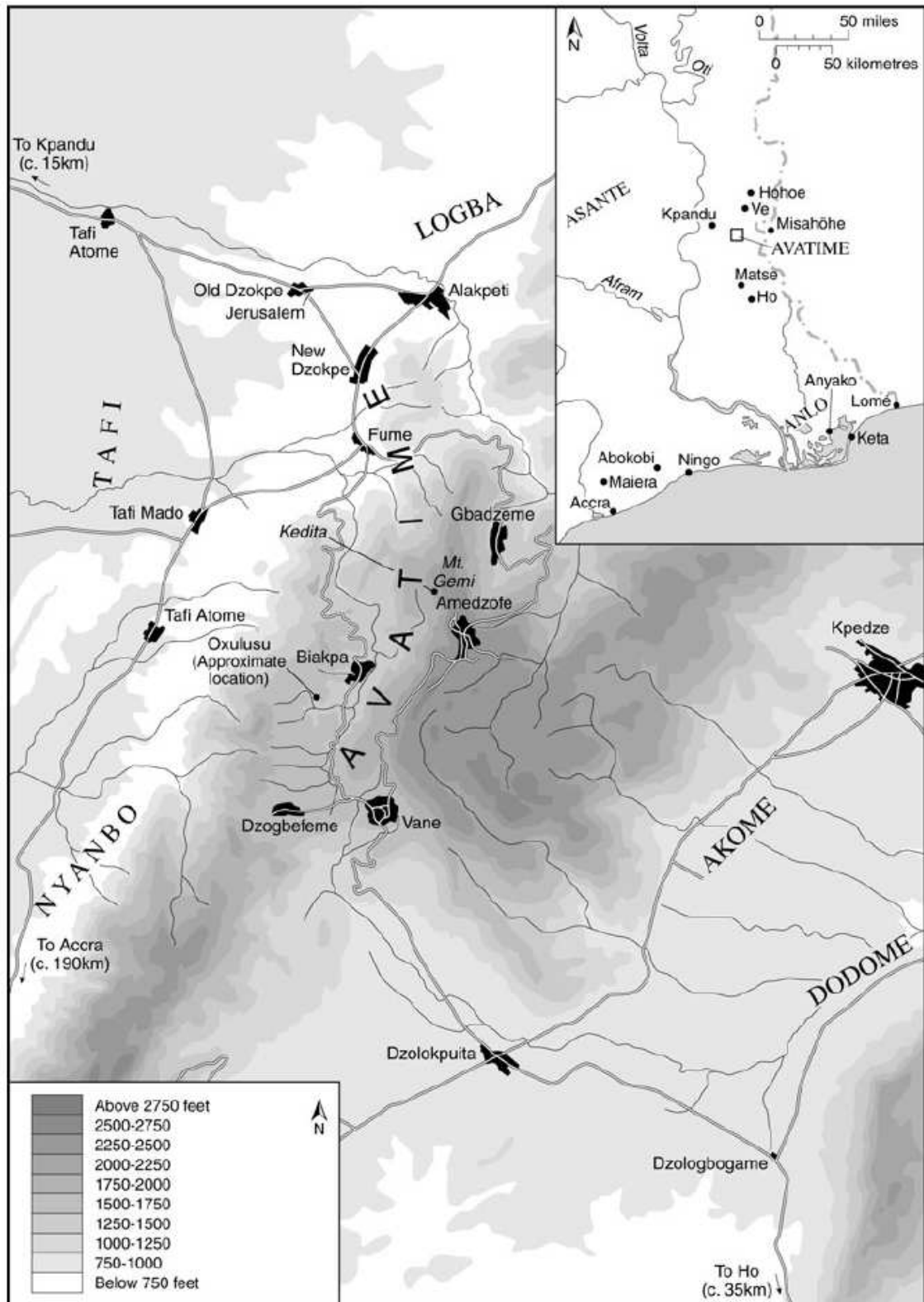
ATR	advanced tongue root
C	consonant
GTM	Ghana Togo Mountain
pl	plural
SVC	serial verb construction
sg	singular
TAM	tense aspect and mood
V	vowel

Distribution of the Ghana Togo Mountain Languages



Branch I corresponds to the NA languages and Branch II corresponds to the KA languages. The languages referred to in this thesis are: 3 – Lelemi (Buem), 7 – Logba, 10 – Tuwuli (Bowii), 13 – Avatime and 14 – Nyangbo and Tafi. (Source: Heine, 1968)

Map of the Avatime area



The main map shows the Avatime villages and their immediate neighbours. The inlay shows the location of the Avatime area within the wider region. (Source: Brydon, 2008:25)

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¹ who passed away in late 2009, may he rest in peace.

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Mlewa lixwe popopo!

Thank you all very much!

1 Introduction

1.1 Research Goals

This thesis sets out to investigate the tense, aspect and modality systems of Avatime, a Ghana Togo Mountain (GTM) language spoken in the hills north of Ho in Ghana. Avatime tense, aspect and modality (TAM) have been discussed previously in two earlier works on Avatime: Funke's (1909) grammar and Ford's (1971a) thesis. Neither of these works discusses the semantics of the TAM forms in much detail, however, and there are some differences between the two descriptions. For instance, the form which Funke refers to as the aorist is called a past tense by Ford and the form which Ford refers to as an immediate future is described by Funke as an intentional. The goals of this thesis are thus:

- 1) To document in some detail the semantics of the TAM forms and in so doing to hopefully resolve the differences between the earlier analyses and come to a more accurate portrayal of the whole TAM system.
- 2) To investigate the situational aspect classes, an area of Avatime aspect that has not been previously studied.
- 3) To investigate differences in the TAM system between the Amedzofe and Vane dialects. Funke and Ford worked on the Amedzofe dialect and my study is based mainly on data from Vane, with some from Amedzofe.

The first two goals have been met reasonably well, and my findings lead me to present here an analysis which differs considerably from either of the earlier descriptions of the Avatime TAM system. The major difference being that I found no evidence for grammatical tense, hence the absence of tense from the title of this thesis. Unfortunately, in many cases, including this question of the existence of tense, I do not have enough data from the Amedzofe dialect to determine whether the differences between mine and earlier analyses are ones of dialect or not. Hence, the third research goal will require more extensive research to be addressed adequately.

The rest of this thesis is laid out as follows. In the remainder of this chapter I discuss the general method for analysis and data collection (Section 1.2) and the manner in which data is referenced throughout the thesis (Section 1.3). More specific method information is given in the relevant sections later in the thesis. In Chapter 2 I give a brief overview of the grammar of Avatime. I then discuss aspect, which I have split into two chapters. Chapter 3 is concerned with lexically based distinctions of situational aspect. Chapter 4 is concerned with the morphological marking of viewpoint aspect. I talk more about this distinction in the introduction to Chapter 3. Mood and modality are discussed in Chapter 5. Finally, I conclude with a summary of aspect and modality in Avatime and a discussion of remaining questions in Chapter 6.

1.2 Method

1.2.1 Analysis

In the interests of providing a description which may be understood by a maximally broad range of readers, I have endeavoured to remain as neutral as possible in terms of the framework that I use for my analysis. Of course some use of technical terminology and theory is unavoidable. However, wherever possible I have endeavoured to use framework neutral

terminology which could be said to be in line with what is now often referred to as Basic Linguistic Theory (Dixon, 1997; Dryer, 2006). In general I have followed the following basic principles while conducting my analysis.

I assume the monosemy bias of Ruhl (1989:4) and will thus prefer analyses which attribute one and only one meaning to each form, or if that is not possible analyses where all the meanings of a single form are related by general principles. As a part of this assumption I take it that forms have a core meaning which may be interpreted in different ways according to context. Thus I shall argue that while the aorist and the progressive are most commonly interpreted with a deictic temporal specification, this specification does not form a part of their core meaning, rather it is created from the context and is easily contradicted. As a further method of deciding between competing analyses I use the principle of Occam's razor and prefer analyses which provide simpler explanations of the available data.

I distinguish tense from aspect based on whether or not the form contains a temporal deictic specification from the speaker's now. I consider tense to be a deictic category specifying position relative to the speaker's current temporal origin. Note that this is often the speaker's now but may also be a shifted reference point, for instance during storytelling. The crucial difference between aspect and tense is that aspect is not a deictic category, and so contains no information relating to the speaker's temporal origin. While in theory this draws a clear distinction between tense and aspect, in practice it can sometimes 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 I follow the principles described above to decide on a preferred analysis.

I have attempted to be fairly ecumenical in the theories and frameworks I have used to inform my analysis. I have also tried to ensure that the end result is not dependent on any one theory or framework and is valid regardless of the theory or framework used to evaluate it. There is one framework that I have found particularly useful in guiding my thinking, which may not be very well known: Klein's (1994) theory of time. In particular I have made use of Klein's idea that tense indicates a relation between the speaker's temporal origin and the topic time, rather than the actual situation time, and that aspect indicates a relation between this topic time and the situation time. In Klein's terminology the speaker's temporal origin refers to the deictic origin, which is usually the now point, the topic time refers to the time that the proposition relates to, and the situation time refers to the time that the situation holds for. 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. So the past tense indicates that the phone rang prior to the time of speech, i.e. it indicates that the topic time is prior to the temporal origin. The progressive aspect 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. Also 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 has yet to occur. While I find this an extremely useful and logical characterisation of tense and aspect, I have used it here as an explanatory device only and all of my findings can easily be converted into a more traditional viewpoint based characterisation.

1.2.2 Data

The results reported in this thesis are based on data collected during a four month fieldtrip conducted with Saskia van Putten, a fellow student, in 2008 and based in the village of Vane. This time was spent gaining a general understanding of the grammar, doing general language documentation work and conducting specific research for our theses. For the first month of our trip we mainly worked together to form a general understanding of the language and its grammar. After the first month of fieldwork we started working more independently and focussing more on our individual topics, though we continued to work at increasing our understanding of other aspects of the grammar. The documentation work was spread fairly evenly out over the duration of the trip. Much of the analyses reported in the grammatical overview in Chapter 2 were worked out jointly. The remaining analyses are all my own, though I have drawn on data collected by Saskia. Of course any mistakes throughout this thesis are solely my own.

Our research was conducted primarily in Vane but we also collected some data in the village of Amedzofe and worked briefly with a man from the village of Fume. We worked with four main informants: a teenage boy Mathias Mahunu, a young man Sammy Kwami Oboni, an elderly man Walter Ray Ofasi and an elderly woman Charlotte Adzoyo Bakudie. We also worked with several of the children at the Junior High School in Vane and made recordings of several other residents of Vane.

I have based my analysis on an 8.5 hour corpus of Avatime speech collected during this field trip and later tagged for temporal markers. This corpus contains 3.5 hours of natural conversation, which was at times prompted with a topic and at times spontaneous. The other 5 hours of speech were elicited via experimental stimuli, though I still consider the speech to be natural. Four sets of experimental stimuli were used during the collection of this data. 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 video clips (Bohnmeyer, 1998), which Saskia van Putten and myself recorded in the field, were used to elicit descriptions of the difference between two clips which differed only in the sequence of events. 4) I developed a task while in the field in order to elicit descriptions of the order in which events occurred. This task involved two participants, one of these watched a short film² and the other was given cards picturing several 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. This task did not work as well as I had hoped in eliciting discussions of event sequencing, because in most cases the participant who had seen the film simply told the story to the other participant who only asked questions about order when it was not clear from the explanation. It did provide some nice instances of story retelling though. Also some useful information was gathered regarding when participants found that the order of events was not clear from the description. There were also a few cases of explicit discussion of event order. In any case, this thesis does not aim to provide a detailed description of the method of sequencing events in Avatime and so, here, I have used these texts simply as examples of narratives.

² Two films were used during this task, the Chicken film from Givón (1991) and the pear story (Chafe, 1975).

In addition to this 8.5 hour tagged corpus my analysis is informed by specifically elicited data. I used the Dahl questionnaire (Dahl, 1985) to elicit Avatime equivalents for a list of English sentences designed to probe the semantics of the target language's TAM system. I also elicited Ewe equivalents for some of these sentences from Felix Ameka, a native Ewe speaker, in order to compare to the Avatime responses and to use as a guide in case my Avatime informants had difficulty understanding the English. None of my informants had difficulty understanding the English sentences, however, so these Ewe sentences are usable as an unbiased comparison to the Avatime sentences. Additionally, I used the Progressive Aspect Questionnaire (Bertinetto, De Groot & Ebert, 2000) to elicit Avatime equivalents for a list of English sentences designed to probe the properties of the target language's progressive forms if present. Finally, I conducted several hours of targeted elicitation both from English to Avatime and from Avatime to English in an attempt to probe the properties and limits of the forms that I had discovered. This type of targeted elicitation was particularly useful when probing for situational aspectual classes and I describe the method I used for that purpose in more detail in Section 3.2. All the findings that I come to based on this elicited material are tested against the corpus of natural speech in an attempt to ensure that they are not a product of the elicitation method and are not contradicted by speakers' natural usage.

1.3 Data Annotation

Throughout the thesis examples are laid out as follows (see example 1). The first line is the Avatime text written in our orthography (see Section 2.3) as it would be pronounced in careful speech. In cases where the recorded form is substantially different from the form used in careful speech an extra line is placed at the top with the Avatime text as spoken. Word boundaries are indicated by spaces and morpheme boundaries are indicated by hyphens. The second line is a morpheme by morpheme gloss (see the List of Abbreviations Used for further details). The third line is a free English translation of the Avatime.

1. *me-dzi tre me ke-pe-a me*
 1S-return go 1S C6S-house-DEF in
 'I've gone back to my house'

(Lego_AB&WO_2)

Tone is marked to varying degrees according to the text the example comes from. For some texts we asked a native speaker to whistle each sentence so that we could transcribe the tones. Thus all tones are marked on examples taken from these texts. Due to time constraints it was not possible to transcribe the tones in all our texts in this manner. Hence there are several texts where we cannot be certain of all of the tones. So in examples from these texts only grammatically relevant tone is indicated.

The source text is indicated after each example, for instance in example 1 the source text is Lego_AB&WO_2. The source text code generally consists of two parts separated by underscores. The first part indicates the type or name of the text. The second lists the speakers. Occasionally we recorded more than one of a certain text type with the same speakers, in these cases the sessions are numbered and this number is indicated at the end of the source text code. So, example 1 comes from the second lego task recorded with DA and FY.

The text types found in this thesis are listed below with a short description. General elicitation sessions are referred to by the initials of the elicitor (R for Rebecca, S for Saskia and RS for

both together) and a number which consists of the month and day of the session and the session number. For instance, RS09232 is a general elicitation session conducted by both Saskia and I on the 23rd of September and it was the 2nd recording we made that day. If an example comes from a questionnaire the number of the question is also indicated following the text type, for instance Dahl_72 refers to question number 72 of the Dahl questionnaire.

Ablabe	story of how puberty rites were conducted. Collected in Amedzofe. Also video recorded.
Conv	unobserved natural conversations.
Dahl	elicitation using the Dahl tense and aspect questionnaire (Dahl, 1985).
Dir-cemetery	directions to the cemetery.
Dir-Gbadzeme	directions to Gbadzeme.
Dir-house	directions to a house.
Dir-market	directions to the market.
Dog	a moral tale about a dog. Collected in Amedzofe. Also video recorded.
Duck	a moral tale about a duck and a rabbit.
Farming	a description of how farming is done in the Avatime lands.
Frog	stories told in response to the frog story picture book.
History	story of the origin and history of the Avatime people. Also video recorded.
Interview	interviews of Avatime speakers conducted by Avatime speakers. Some are also video recorded.
Lego	speech elicited by the Lego route description task. Also video recorded.
Life	a description of the speaker's life. (Some also have video recording).
Okra	a recipe for making okra soup.
PAQ	elicitation using the Progressive Aspect Questionnaire (Bertinetto, De Groot & Ebert, 2000).
Past	description of how things have changed over the last few decades. (Some also have video recording).
Pear	stories told in response to the pear story video clip.
Tempest	descriptions of scenes in the Tempest video clips (Bohnmeyer, 1998; rerecorded by Saskia and myself in the field)
Wake	report of how a corpse was brought back to Vane for burial, told at the wake ceremony.

The speakers referred to in this thesis are listed below with some brief demographical information.

A	Adzo, an 18 year old girl from Vane.
AA	Abitele Adorbor, a young girl from Vane, daughter of EA and VA.
AB	Charlotte Adzoyo Bakudi, a 62 year old woman from Vane.
ED	Elvis Dzeradosi, a 12 year old boy from Vane.
ErA	Eric Adorbor, a 41 year old man from Vane, father of Abitele.
FO	Fidelia Ohovi, an elderly woman from Vane
GE	Grete Ebedi, an elderly woman from Vane.
HO	Happy Odzor, a 15 year old girl from Vane.
K	Korku, a 16 year old boy from Vane.
KA	Kennedy Adipa, a 14 year old boy from Vane.
MM	Mathias Mahunu, 19 year old boy from Vane.

- MN Mawutor Nyamevor, a 14 year old boy from Vane.
MO Mawulolo Onipaneya, a 16 year old girl from Vane.
PA Peace Akoto, a 70 year old woman from Amedzofe.
RE Richard Edzeani, an 18 year old boy from Vane.
SM Samuel Mahunu, an elderly man from Vane, MM's grandfather.
SN Susan Nugble, a 13 year old girl from Vane.
SO Sammy Kwami Oboni, 31 year old man from Vane.
VA Vida Adorbor, a 33 year old woman from Vane, mother of Abitele.
WB Woagba Bazudie, a 70 year old man from Vane.
WO Walter Ray Ofasi, elderly man from Vane.

Full transcriptions as well as the audio and video recordings of all texts cited in this thesis are available through the ELAR archive.

Chapter 2 Grammatical Overview

2.1 Introduction

In this chapter I give a brief sketch of the basics of Avatime grammar to assist the reader to understand and situate the material contained in the rest of the thesis. This is by no means intended as a comprehensive grammar sketch. First, in Section 2.2, I give some background information on the classification and social setting of the language and previous research that has been done on Avatime. In Section 2.3 I give an overview of the phonology system and describe the orthography I use. I then give an overview of nominal and verbal morphology in Section 2.4. Section 2.5 contains a brief sketch of some aspects of Avatime syntax.

2.2 Background

2.2.1 Classification

Avatime is one of a group of fourteen languages called Togo Remnant, Central Togo or preferably Ghana Togo Mountain (GTM) languages. There is some disagreement about the genetic classification of these languages. This is most likely due to the lack of information that has been available, a situation which will hopefully be soon improved by several investigations of GTM languages which are currently taking place. Heine (1968) classified the languages into two subgroups within the Kwa subgroup of Niger-Congo. He called these subgroups NA and KA and Avatime was classified as a KA language. Stewart (1989) then suggested that the NA and KA groups were better analysed as belonging to two separate branches of the Kwa language family. He claimed that the NA languages belong to the Nyo branch while the KA languages belong to the Left Bank branch. This would mean that Avatime is more closely related to some non-GTM languages such as Ewe than it is to other GTM languages in the NA group. Williamson and Blench (2000) then suggested that the NA and KA groups branch out from proto-Kwa, in which case all GTM languages would be relatively equally related to non-GTM Kwa languages. Blench (2001) goes further claiming that due to the difficulties encountered when trying to relate GTM languages to Kwa languages it is better to treat them as a typological group consisting of four genetic clusters coming from Niger-Congo. In all of these analyses Avatime's closest relatives are considered to be Nyangbo and Tafi, and it seems indisputable that these three languages are indeed closely related, and, while the exact relations are not yet determined, it is likely that these three languages are also closely related to the other members of the KA subgroup and to a somewhat lesser extent to the NA and Kwa languages.

2.2.2 Social setting

Avatime is spoken in eight villages in the Volta Region of Ghana: Amedzofe, Biakpa, Dzogbefeme, Fume, Gbadzeme, New Dzokpe, Old Dzokpe and Vane (see the Map of the Avatime Area). The most recent estimates of the number of Avatime speakers range from 7,511 (2000 census data cited by Adjei, 2007), to 24,000 (2003 census data cited by Gordon, 2005). The cause of the difference between these two census reports is not clear but it seems highly unlikely that the number of speakers actually trebled within these three years and from our time in the region Saskia van Putten and myself believe the number of speakers is more likely to be around 10,000.

Avatime is the Ewe name for the language. The people themselves call it *Sīya*(se), literally ‘(the) language’, or *Sīdeme*(se), which is formed from the Avatime name for their land *kideme*. There is some controversy in the region about which name should be used. *Sīdeme* appears to be the older term for their language in particular, whereas *sīya* can be used to refer to any language or to language in general, however *Sīdeme* is not recognised by all speakers. *Sīya* is also based on the name of the people who used to live in the area, the *Baya*, whose language the Avatime people adopted when they moved into the region. The term Avatime is not considered derogatory and as most previous research has been done using this name I will continue to use it here.

The Avatime speaking area is bordered to the west by two KA GTM languages, Tafi and Nyangbo, to the north by Logba, a NA GTM language, and to the east and south by Ewe. Ewe is the dominant language in the region and almost all Avatime speakers are also fluent in Ewe. Many Avatime people also speak English and/or Akan. Some very old people, particularly in Amedzofe, also speak some German as Amedzofe was a German mission post until the end of the first world war. Ewe is used in most commercial interactions outside of the Avatime villages and in early primary school and church within the Avatime area. English is used in the later years of school, on the radio and television and for interactions outside of the region. Avatime is spoken in domestic and traditional domains within the eight Avatime speaking villages.

Each Avatime village has its own distinct dialect of Avatime. These can be quite different, for instance the dialects of Amedzofe and Vane have different forms for several TAM categories and some different phonological rules even though they are located within half an hour’s walk of each other. They can also be very similar, for instance the main differences between the Fume and Amedzofe dialects seem to be lexical. This thesis is based on data from the Vane dialect and so can only be considered to hold for that dialect. Some data was also collected in Amedzofe and we did some elicitation with a Fume man. All previous work on Avatime has been on the Amedzofe dialect so I will occasionally make comparisons between the Amedzofe and Vane dialects.

There is no standard orthography for Avatime, but the Ghana Institute of Linguistics, Literacy and Bible Translation (GILLBT) is currently developing one. Saskia van Putten and I have developed our own orthography based on the Ewe orthography which we considered would be most familiar to Avatime speakers¹. While there are likely to be some differences between the orthography used here and the final Avatime orthography developed by GILLBT we believe that these differences will be minor and the two orthographies will be mutually intelligible.

2.2.3 Previous research

As mentioned above, all previous research on Avatime has solely concerned the Amedzofe dialect. The earliest description of Avatime was written in 1909 by Funke, a German missionary. In 1910 he published a word list. After that, three other word lists were collected, one in 1962 (Ladefoged, 1962), one in 1967 (Kropp, 1967) and one sometime between 1960 and 1975 by Stewart (n.d.). Unfortunately, none of these word lists consistently mark tone or the –ATR high vowels. In 1971, Ford wrote a PhD thesis (Ford, 1971a) on the tone system of

¹ Though we later discovered that Avatime children no longer learn how to read Ewe and so young Avatime speakers were in fact not very familiar with the orthography.

Avatime and some aspects of the syntax. His analysis of the tone system was very thorough and has been of immense help to all researchers who came after him. While Funke described Avatime with nine vowels², Ford did not find a \pm ATR distinction in the high vowels and so described the language with seven vowels. Ford also wrote a brief description of the noun class system in 1971 (Ford, 1971b). After this, nothing was written about Avatime until 1995, when Schuh published two articles: one describing the phonology (Schuh, 1995a) and the other the noun class system (Schuh, 1995b). In the phonology article, Schuh mostly confirms Ford's (1971a) analysis of the tonal system, making the rules more readable and elegant. He also provides a good description of the vowel harmony system and the processes of vowel reduction, and was the first researcher to write Avatime with $-$ ATR high vowels. In 1998, Maddieson published another article about the phonology of Avatime, detailing two findings. The first is that the $-$ ATR high vowels are definitely phonemic and that there is ATR based vowel harmony. The second is that there are no doubly-articulated fricatives in Avatime, as Ford (1971a) had claimed. The sounds that Ford described as doubly-articulated fricatives are in fact labialized velar fricatives. The most recent article written on Avatime is by Adjei in 2007, regarding adjectives. Thus the phonology and morphological aspects of the noun class system of Avatime have been fairly well described. Other areas have had less attention and no investigation of other dialects has yet been done.

Currently, a GILLBT group headed by Divine Mununkum is conducting some research on Avatime as part of a language development and literacy project. One of their main contributions to linguistic knowledge and theory will likely be the research they have done into dialectal variation. There is also a project based at Leiden University, headed by Felix Ameka, currently working on documenting the Southern GTM languages Logba, Nyangbo and Tafi.

2.3 Phonology

Avatime's phonological system has been well researched by Ford (1971a), Schuh (1995a) and Maddieson (1998). There are many very interesting areas which still require further investigation, but in general its phoneme inventory and basic processes are quite common for the region. I will not discuss the system in much detail here, instead I will just give a quick overview of the phoneme inventory and some of the more important phonological processes.

2.3.1 Consonants

Table 1: Consonant chart

	bilabial	labiodental	alveolar	palatal	velar	labial-velar
stop vl	p		t		k	kp
stop vd	b		d (d)		g	gb
fricative vl	(f [ɸ])	f	s		x	xw [x ^w]
fricative vd	v [β]	v	z		h [ɣ]	hw [ɣ ^w]
affricate vl			ts	tsy [tʃ]		
affricate vd			ɖ	dzy [dʒ]		
nasal	m		n	ny [ɲ]	ŋ	ŋw [ŋ ^w]
oral sonorant	w		l/r	y [j]		

² Though he didn't distinguish the \pm ATR high vowels in his orthography.

The consonants above are listed in our own orthography. In many cases there is no difference between this orthography and the IPA convention. There are some deviations, though, and in these cases the IPA symbols are given between square brackets.

The consonants between round brackets, the voiced apical postalveolar stop /d/ and the voiceless bilabial fricative /f/, only occur in loan words, typically those from Ewe.

The velar fricatives x, h, xw and hw, have very little noise at the velum and sound very similar to their glottal counterparts /h, fi, h^w, fi^w/.

The /l/ and the /r/ are in complementary distribution. /r/ occurs after alveolar and palatal consonants and /l/ occurs elsewhere, for example *trē* ‘go’, *nyrɔ* ‘sink’, *plē* ‘descend’, *li-vle* ‘morning’ and *li-kla* ‘stone’. There are a handful of exceptions to this rule, mainly in loan words, for example *ɔflaga* ‘flag’ and *prudu* ‘fly’.

The voiced bilabial fricative /v/ is clearly phonemic in some dialects, such as the Fume dialect, but in other dialects the distinction appears to have been lost. In the Vane dialect, /v/ and /b/ appear to be in free variation in casual speech, but the distinction is largely maintained in careful speech.

This consonant chart differs slightly from those in earlier descriptions of Avatime. Firstly, Ford (1971a) describes a set of doubly articulated labial-velar fricatives [xɸ] and [ɣβ]. Maddieson (1998) found that these were actually labialised velar fricatives rather than truly doubly articulated labial-velar fricatives and we found no evidence to contradict Maddieson’s findings. The other difference is that Schuh (1995a) claimed there was no distinction between alveolar and palatal affricates. He found that while there was variation in place of articulation of affricates it was not regular or phonemic and possibly depended on the speaker. We found that while this is the case for speakers under the age of around 50, who mainly use the palatal affricates and cannot hear a place distinction for affricates, older speakers clearly make a regular phonemic contrast in place of articulation and there are several minimal pairs, for instance *tsi* ‘grow old’ and *tsyɪ* ‘pour’.

2.3.2 Vowels

Table 2: Vowel chart

	front		central		back	
	+ ATR	- ATR	+ ATR	- ATR	+ ATR	- ATR
high	i	ɨ [ɪ]			u	ɯ [ʊ]
mid	e	ɛ			o	ɔ
low				a		

Avatime has a 9 vowel system with ATR vowel harmony. The harmony is triggered by the ATR value of the root. In general the ATR pairs are the obvious ones: /i, ɨ/, /u, ɯ/ and /o, ɔ/. There is some complication in the pairings of the front-mid vowels and the central vowel, which is most likely due to the loss of a tenth +ATR central vowel which was paired with /a/. In suffixes the situation is simple: /a/ does not harmonise and /e/ alternates with /ɛ/. In prefixes the situation is slightly more complicated. In some cases /a/ does not harmonise and in others it harmonises with /e/, while /ɛ/ always harmonises with /e/. I believe the best synchronic explanation for this distribution is that some prefixes are underlyingly /a/ and they

do not harmonise, underlying /e/ harmonises with /a/ and underlying /ɛ/ harmonises with /e/. The current behaviour is likely due to the loss of the old +ATR central vowel and there is likely a more satisfying diachronic explanation for the current distribution involving the previous distribution of this +ATR central vowel. In my orthography I will write affixes with capital vowels to indicate the ATR pairs: *I* refers to the pair /i, i/, *U* to /u, u/, *E* to /e, ɛ/ and *O* to /o, ɔ/. However, in prefixes I will use *e* to refer to the /e, a/ pair and *ɛ* to refer to the /e, ɛ/ pair. The non-alternating /a/ is always referred to as *a*.

Ford (1971a) found no distinction between the high ±ATR vowels. We found that there was still a clear phonemic distinction (for instance *tsī* ‘grow old’ vs. *tsī̄* ‘peel’ and *kī-kū* ‘yam’ vs. *kī̄-kū̄* ‘rubber’). Though, the distinction is disappearing in younger speakers, mostly those under the age of 20.

It is possible for vowels to be nasalised. Though, any previous phonemic nasality contrast seems to be disappearing. Funke 1909 reported many more cases of nasalised vowels than have been found in later work and we found only a handful of examples. Currently nasality is sometimes audible but is also often not pronounced and is only shown by the conditioning of nasalisation in suffixes. We have only heard audible nasalisation on –ATR vowels, such as *gã̃* ‘move’, *sẽ̃* ‘leave’, *tsyĩ̃* ‘tear’, *ɔ̃-gɔ̃* ‘coconut’ and *sũ̃* ‘side’, though we are not certain of this last one. For +ATR vowels there are some words which look like the vowel was previously nasalised though it is no longer pronounced, for example *lī-dzè-nē* ‘the egg’ and *ì-tsrē-nè* ‘the okra beans’, the –*ne* form of the definite suffix is normally triggered by a preceding nasal, otherwise it would be –*le*. Because nasalisation is often not pronounced and there are no minimal pairs we have decided not to mark it in our orthography.

2.3.3 Tone

Avatime has three contrastive level tones: high, mid and low, for example *tsyí* ‘turn’, *tsyí* ‘pour’, *tsyí* ‘tear’, *sì-yà* ‘language’ and *sī-yà* ‘hair’. The high tone has a restricted distribution. It does not occur on noun roots except in some loan and ideophonic words, for example *ɔ-flágã*, ‘flag’ and *ɔ-kúkū* ‘chicken’, and is much less frequent on verb roots than the mid and low tones. There is also a contour low-high tone, for example *lě* ‘then’ and *zě* ‘recurrent’. Falling contour tones only occur across two vowels, for example *tráà* ‘come’ and *áà-sē* ‘he will leave’. In fast speech contour tones are often produced as mid.

Ford (1971a) proposes a four level tone analysis of Avatime consisting of extra high, high, mid and low level tones, with the extra high and mid tones having a restricted distribution and likely formed from fossilized processes of raising in a previously two tone system. Saskia van Putten carried out an extensive search for Ford’s mid tone and found that in all cases where Ford reported it was used our informants, including the man from Fume, used another tone, either Ford’s extra high or high tone, or a high-low contour tone. Hence we decided to treat Avatime as a three level tone language and have relabelled Ford’s tones so that his extra high corresponds to our high, his high corresponds to our mid and his low corresponds to our low.

Tone is used mainly lexically, but there are some grammatical uses as well. For instance a floating high tone is the main indicator of negation and is often the only distinction between a positive and negative statement, for example *lī-tō-lè lī-mū* ‘the mountain is high’ compared with *lī-tō-lè lí-mū* ‘the mountain is not high’. Focus is also indicated by a high tone: the last tone of a fronted focused constituent is replaced by a high tone, for example *mɔ̃-lē òhòlò* ‘I live in Ho’ compared with the same sentence with Ho focused *òhòlò mɔ̃-lē* ‘In HO I live’.

2.3.4 Syllable structure

Roots are predominately monosyllabic. The following syllable types are possible in roots: 1) CV, for example *t̄* ‘cook’ and *l̄i* ‘be.at’. 2) CVV, for example *gl̄è* ‘fall’ and *ò-m̄ōē* ‘orange’, note that sequences of different vowels in one syllable are often realised as GV in non-careful speech. 3) CCV where the second consonant must be an oral sonorant, for example *ɲwli.mi* ‘write’, *i-tsr̄ē* ‘okra beans’ and *ō-mwī* ‘goat’³. Affixes can be either V or CV. For example *e-* ‘3rd person singular subject agreement’, *mo-* ‘1st person singular subject agreement’, *-a* ‘Class 1 plural definite’ and *-le* ‘Class 2 plural definite’.

2.3.5 Phonological processes

Vowels in affixes harmonise with the ATR value of the root. For example *wò-dō* ‘you said’ and *wò-dō̄* ‘you drowned’.

Sonorant consonants in suffixes become nasalised following a syllable which contains a nasal. For example *-lo* ‘Class 2 singular definite’ becomes *-no* in *ò-m̄ōē-nò* ‘the orange’ and *ò-ḡō-nò* ‘the coconut’.

Adjacent vowels can coalesce. Schuh (1995a) gave a detailed account of this process in the Amedzofe dialect where adjacent vowels seem not to be permitted at all even in careful speech. We found that adjacent vowels are allowed in the Vane dialect, though in fast speech they can coalesce, generally following the principles that Schuh outlined for the Amedzofe dialect. We have not looked in detail into this process of coalescence and so cannot comment further on its properties.

2.4 Morphology

2.4.1 Nouns

Avatime is a noun class language. There are six singular and plural pairings and one mass noun class. I shall refer to these pairings as noun classes, rather than the individual singular and plural groups because unlike in many Bantu languages each singular and plural form only occurs in one singular/plural pairing. No fewer than five different numbering systems have been used for the noun classes in previous work on Avatime and in light of this Schuh (1995b) decided to refer to them by their prefixes rather than create a new numbering system. In this thesis I have used the numbering system based on Heine’s (1968, 2008) comparison of noun classes in GTM languages in an attempt to increase the readability and usability of this description for other GTM language researchers (see Table 3 for a comparison of the different numbering systems).

Table 3: Comparison of noun class numbering systems, adapted from Schuh (1995b: 129)

Prefix	Heine (1968)	Ford (1971a)	Ford (1971b)	Kropp Dakubu & Ford (1988)	Funke (1909) Kropp (1967)	The current work
O-/be-	I	1	1a	1/2	1	1
Ø-/Ø-	I	no mention	1b	(1/2)	8	1
Ò-(l)Ì-	II	7	2	3/4	6	2

³ Note that it is possible that this /w/ is really a back vowel. We have never heard it as a back vowel but we have not checked this word in careful speech.

II-/a-	III	2	4	5/6	7	3
kI-/bI-	IV	3	3	7/8	4	4
kU-/bè-	V	4	5	11/12	2	5
ke-/kÛ-	VI	5	7	13/14	5	6
sI-	VII	6	6	9/10	3	7

The noun classes are indicated by an obligatory noun class prefix on the noun root. Loan words, however, generally do not take a noun class prefix, though their agreement is from Class 1. Most other elements of the noun phrase, such as adjectives, do not agree with the head noun. Some elements of noun phrases agree partially, specifically demonstratives, cardinals, ‘how many’ and ‘some’ (see Table 4 and examples 1-4). Ordinals are the only elements where the noun class prefix is repeated in full.

Table 4: Noun class prefixes, definite suffixes and partial agreement forms

Noun class	Prefix	Definite suffix	Partial agreement forms		
			Demonstratives	Cardinals / how many	Some
1. sg	O- / Ø	-(y)E	liye / lɛ-lɔ	to-le ‘one’	ɔ-tɔ
1. pl	be- / Ø	-(y)a	ba-ya / ba-lɔ	tja-sɛ ‘how many’	a-tɔ
2. sg	Ò-	-IO	lɔ-	to-le ‘one’	ɔ-tɔ
2. pl	(I)Ï-	-IE	lɛ-	ti-sɛ ‘how many’	ɛ-tɔ
3. sg	II-	-IE	lɛ-	ti-le ‘one’	ɛ-tɔ
3. pl	e-	-la	la-	ta-sɛ ‘how many’	a-tɔ
4. sg	kI-	-(y)E	kɛ-	ti-le ‘one’	ɛ-tɔ
4. pl	bI-	-(y)E	bɛ-	tu-ba ‘two’	ɛ-tɔ
5. sg	kU-	-(y)O	kɔ-	tu-le ‘one’	ɔ-tɔ
5. pl	bè-	-(y)a	ba-	tja-sɛ ‘how many’	a-tɔ
6. sg	ke-	-(y)a	ka-	ti-le ‘one’	a-tɔ
6. pl	kÛ-	-(y)O	kɔ-	tu-ba ‘two’	ɔ-tɔ
7	sI-	-sE	sɛ-	tɔ-sɛ ‘how many’	ɛ-tɔ

1. *ò-gbé lɔ-yà ē-dzè*
 C2S-rope C2S-this C2S-be.long
 ‘This rope is long.’

(S10271_SO)

2. *ē-gùmè bìdī tā-bá lá-yà*
 C3P-cow big C3P-two C3P-this
 ‘these two big cows’

(RS09191_SO)

3. *mà-kpē kù-mò ò-tɔ ní ò-nī-nō mè*
 1S-put C6P-salt C6P-some LOC C2S-soup-DEF in
 ‘I put some salt in the soup.’

(Okra_AB)

4. *sì-yà tǎ-sé wú-zě-pāni*
 C7-language C7-how.many 2S-HAB-speak
 ‘How many languages do you speak?’

(S10271_SO)

2.4.2 Verbs

Verbs in Avatime are generally marked with a subject agreement prefix and one of a set of obligatory aspect/mood markers. The bare verb is used to indicate the 2nd person singular imperative. There are also four sets of optional modifiers which may occur in the verb complex. The structure of the full Avatime verb complex is shown in example 5 and example 6 shows a verb with the maximum number of inflections.

5. Subject Agreement - (Negative) - Aspect/Mood 1 - (Aspect/Mood 2) - (Aspect/Mood 3) - (Directional)/(Prohibitive⁴) - Root - (Commitative)

6. *mɔ-tá-zě-zě-pa-ni* wɔ
 1S:NEG-INT-REP-IT-talk-COM 2S
 ‘I will not be going to talk with you.’

(R11291_AB)

There are three sets of subject agreement markers (Table 5). The set used depends on the aspect or mood category and the particular verb. Set 1 is used in the positive aorist, progressive and potential. Set 2 is used for negatives, for the subjunctive of some verbs (see Section 5.3 for a discussion of which verbs), and the aorist of positional and copula verbs. Set 3 is used in the habitual and for the subjunctive of some verbs. In general the tone on these subject agreement prefixes varies according to the particular verb used. There are a few cases, however, where the prefix is consistently low and these are marked in the table.

Table 5: Subject agreement markers

	Set 1	Set 2	Set 3
1 person sg	me-	mO-	mI-
1 person pl	kI-	kU-	kI-
2 person sg	wO-	wO-	wU-
2 person pl	mle-	mIa-	mII-
Class 1 sg	e-	O-	I-
Class 1 pl	bɛ-	ba-	bI-
Class 2 sg	è-	O-	I-
Class 2 pl	ĩ-	I-	I-
Class 3 sg	II-	II-	II-
Class 3 pl	ɛ-	e-	I-
Class 4 sg	kI-	kI-	kI-
Class 4 pl	bI-	bI-	bI-
Class 5 sg	kɛ-	kU-	kI-
Class 5 pl	bɛ-	ba-	bI-
Class 6 sg	kɛ-	ka-	kI-
Class 6 pl	kI-	kU-	kI-
Class 7	sI-	sI-	sI-

⁴ Note it isn't yet clear where the prohibitive fits into the verb complex in relation to the directionals. In all examples they both occur immediately before the verb root but as yet I have no examples with both occurring together in order to test their relative order.

There are some patterns in the sets of subject agreement forms indicating that they were created by regular morphological and or phonological processes. The forms which have the high front vowel pair /i, i/ in Set 1 are the same in all sets, with the exception of the Class 6 plural form which is *kI-* in Set 1 and 3 but *kU-* in Set 2. All forms in Set 3 have a high vowel, and except for the 2nd person singular this is the high front vowel pair /i, i/. The 2nd person singular is also unique in being the only form with a back vowel in Set 1. Set 2 generally has back or central vowels while the other sets generally have front vowels. Thus it is highly likely that the basic form of the 2nd person singular is a back vowel and that Set 3 is formed by the addition of a high front vowel. Given the current state of the rest of the paradigm with its large number of exceptions it is difficult to determine any of the other basic forms.

Avatime does not have tense. Ford (1971a) and Funke (1909) analysed some forms as tenses but as I shall argue in Chapters 4 and 5 these are all better treated as either aspects or moods and do not contain any tense specification.

Aspect and mood are indicated by a combination of the subject agreement set used and aspect/mood prefixes. See Table 6 for a list of the subject agreement sets and prefixes used to indicate all of the aspect and mood categories.

Table 6: Aspect and mood markers

Aspect / Mood		Subject Agreement	Aspect/Mood Morpheme	Position on the Verb
Basic Aspects	Aorist	Set 1 (Set 2 for copula and positional verbs)	None	Aspect/Mood 1
	Progressive	Set 1	ě- (lí- in the negative)	
	Habitual	Set 3	zě- (- in the negative)	
Basic Moods	Potential	Set 1	â-	
	Subjunctive	Set 2 or 3	None	
	Imperative	None	None	
Negative Markers	Negative	Set 2	' -	Negative
	Prohibitive (verb must also be marked for subjunctive)	Depends on basic aspect/mood marking	kú-	Prohibitive
Optional Aspects and Moods	Prospective		hà-	Aspect/Mood 2 or 3
	Intentive		tá-	Aspect/Mood 2
	Recurrent		zě-	Aspect/Mood 3

Every verb must be marked for one and only one of the basic aspect/mood distinctions: aorist, progressive, habitual, potential, subjunctive and imperative.

All verbs can also be placed in the negative. In most cases the general negative form is used. However, the prohibitive must be used instead for verbs in the subjunctive or imperative. Also, due to a quirk of the Vane dialect, the potential has no negative counterpart. See Section 5.7 for further details on negation.

There are three optional aspect and modality markers which can be marked on the verb. The intentive mood marker *tá-* occurs in the Aspect/Mood 2 slot and the recurrent aspect marker *zě-* occurs in the Aspect/Mood 3 slot. It is not yet clear where the prospective aspect marker *há-* occurs, but given its distribution I think it most likely occurs in the Aspect/Mood 2 slot. All of these forms must be preceded by an aspect or mood marker from the basic set and they can co-occur with each other, though I do not have any examples of the prospective occurring with the recurrent or the intentive. The intentive and prospective seem to occur with a more limited set of basic aspect and mood markers, as I only have examples of them occurring with the positive and negative aorist, the progressive and the subjunctive. The recurrent seems to be able to occur with all aspects and moods. It is very possible that this difference is an effect of my sample size and it may be that all of these three forms can occur with all the basic aspect and mood markers.

There are two directional prefixes which can optionally occur on the verb: *zě-/zě-* ‘itive’ and *bá-/bé-* ‘ventive’ (examples 7-9). These occur after all aspect and mood marking⁵. These forms likely came from the verbs *zā* ‘pass’ and *bā* ‘come’. It is especially interesting to consider the ATR values of these forms and their alternations. The ventive prefix alternates between *bá-* and *bé-* but this alternation is not triggered by vowel harmony and all prefixes preceding this marker are -ATR regardless of which form is used (examples 7 and 8). This alternation is likely a fossilized remnant of the serial verb construction vowel which would have occurred between this marker and the verb root if it had been a verb. The itive prefix is even more interesting. While it does harmonise with the verb root, at least for some speakers, it is always preceded by -ATR prefixes (example 9). This may be a remnant of its previous form as *zā* but it now only ever occurs as either *zě-* or *zě-* indicating that it may be being reanalysed, possibly due to the kind of alternation we see in the ‘come’ prefix *bá-/bé-*.

7. *a-be-ku*

C1S-VENT-arrive

‘S/he has arrived (here).’

(S11172_MM)

8. *èé-ba-ku*

C1S:PROG-VENT-arrive

‘S/he has been arriving (here).’

(S11172_MM)

9. *a-zě-ku*

C1S-IT-arrive

‘S/he has arrived (there).’

(S11172_MM)

There is only one verb suffix in Avatime and that is the commitative *-nì/-nò*. It is no longer a fully productive form though and tends to have very idiosyncratic meanings, for example *kū* ‘arrive’ vs *kū-nì* ‘follow’. There are also several verbs which are currently only used with this suffix, the original root form apparently having been lost, for example *klàni* ‘go around/take someone around’.

⁵ Note that Ford (1971a) reports these forms occurring before the recurrent marker and sometimes even before the habitual marker, this may be a dialectal difference but requires further testing.

2.5 Syntax

Not much research has been done into syntax in Avatime and so I will just list a few points briefly which may assist in the reading of the examples contained in this thesis.

Grammatical relations are primarily indicated by word order, which is SVO. This is supplemented by subject agreement on the verb but this is largely redundant unless there is no overt subject.

Avatime is a pro-drop language and, unless the subject is being emphasised, a known subject will be referred to only by the subject agreement on the verb.

Avatime, like many languages of the region, has serial verb constructions, see Ford (1971a) and van Putten (2009) for more information on these. In some cases there is a vowel which precedes the second verb of a serial verb construction. I call this vowel a serial verb construction vowel and it varies according to the subject and TAM marking of the first verb, see van Putten (2009) for more information regarding these vowels.

Avatime has postpositions and one general locative preposition *nĩ* which must also be used whenever a postposition is used.

Possession is indicated by adjacency. The possessor precedes the possessed (example 10). With body parts and kin terms the possessor pronoun is fused with the possessee (example 11).

10. *ye* *o-go-no*
 C1S C2S-coconut-DEF
 ‘his/her coconut’

(RS09041_SO)

11. *ye-ka*
 C1S-father
 ‘his/her father’

(RS09041_SO)

There are several clause coordinators, unfortunately their function has not been researched yet and they remain a topic for future study.

There are two complementizers: *sĩ* is used to introduce a subordinate clause, and *gĩ* is used to introduce relative clauses as well as some other subordinate clauses.

There is a group of verbs, the copulas and positionals, which only occur in the aorist. In all other aspect and mood categories these verbs are replaced by the general copula verb *zè*. These verbs are the locative copula *lĩ* ‘be at’, the equative copula *nu* ‘be’ and the positional verbs *dĩ* ‘sit’, *kpàsĩ* ‘be in’, *tĩnĩ* ‘be on’ and *sũnũ* ‘hang’. Ewe has a similar distinction between a present and past form of the ‘be at’ copula *le/nɔ*. The Avatime pattern is slightly different though because the *zè* copula is used to replace many verbs and the distinction is not purely one of tense. The *zè* verb is used to refer to present situations which are not in the aorist, for instance example 12. Also, with the exception of *lĩ* ‘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 example 13.

12. *èé-ze ní ɔvanɔ*
C1S:PROG-be LOC Vane
'He is still in Vane.'

(R11171_SO)

13. *ku-ni-o kɔ-kpasi ní ɔ-kpekpe-yɛ*
C5S-water-DEF C5S-be.in LOC C1S-black-DEF
'There was water in the black one.'

(Tempest_SO)

Verbs can be nominalised by reduplicating the verb stem. All de-verbal nouns are placed in Class 5 (example 14).

14. *ku-ɲwlimi-ɲwlimi*
C5S-write-REDUP
writing

(Tempest_WO_2)

Like many languages of the region, Avatime has ideophones. They are found in all the open word classes: nouns (e.g. *à-kùkù* 'chicken'), adjectives (e.g. *dzódzō* 'tall'), adverbs (e.g. *rìdì(dìdìdì)* 'repeatedly') and verbs (e.g. *srā(srā)* 'smear'). With ideophones, reduplication indicates intensification rather than nominalisation, for instance *srāsrā* 'smear a lot' still functions as a verb rather than a noun.

Chapter 3 Situational Aspect

3.1 Introduction

Aspect refers to the temporal structure of the situation¹. In contrast to tense it does not specify the temporal location of the situation. Over the years there have been many approaches to aspect and there are currently many different frameworks for analysing aspect in use. Many of these have widely diverging views on multiple fundamental issues. It is beyond the scope of this thesis to review these different approaches, for an excellent overview I direct the reader to Sasse (2002). In this introduction I shall instead focus on detailing the particular approach to aspect that I have taken here, so that my results will be interpretable by the reader regardless of their theoretical orientation.

I distinguish two types of aspectual information and follow Smith (1997), Bhat (1999) and others in referring to them as situational and viewpoint aspect. Situational aspect, also known as Aktionsart, lexical aspect or simply aspect, relates to the internal temporal structure of the situation itself. It is thus usually part of the lexical specification and not grammatically indicated. The most common distinctions made by situational aspect are: dynamic versus non-dynamic situations, i.e. the distinction between events and states; situations with an inherent end-point (telic) versus those without (atelic); and situations with duration versus punctual situations. Viewpoint aspect, also known as grammatical aspect or simply aspect, relates to the view of the situation presented by the speaker, or how the situation is presented relative to other situations. Hence viewpoint aspect is generally changeable and not contained within the lexical specification. It is thus normally expressed by grammatical means. The most common viewpoint aspect distinction made is that of perfective, which presents the situation as a whole, versus imperfective, which presents the situation as ongoing or viewed from within. These two types of aspect interact and many researchers have questioned the extent to which they should be separated. I agree with Bhat in that while these two types of aspect are intertwined and a grammatical distinction may ultimately be unmotivated it is useful to consider them separately in order to better understand the ways in which they interact and thus to better understand the aspectual systems of languages in general. In the rest of this chapter I shall consider situational aspect and in the next chapter I will consider viewpoint aspect.

I follow researchers such as Verkuyl (1973), Klein (1994) and Smith (1997) in considering situational aspect to be a property of sentences. Some researchers, such as Rothstein (2004), prefer to consider it as a property of individual verbs and others, such as Binnick (1991) prefer to consider it as a property of verb phrases. I have chosen to consider sentential situational aspect here primarily because the subject agreement on Avatime verbs makes it easier to examine whole sentences rather than verbs or verb phrases in isolation. Also while it cannot be doubted that individual lexemes contain temporal information which combine in interesting and as yet under researched ways, it is also clear that they combine and function as a unit at some larger level. I believe that the natural domain for this larger unit of situational aspect would be structures which have the Macro Event Property as described by Bohnermeyer et al (2007). The Macro Event Property is defined by the scope of temporal operators. Constructions with the Macro Event Property cannot have temporal modifiers relating to only a part of the event, all temporal modifiers of constructions with the Macro Event Property must scope over the whole situation. From this definition I think it is clear that

¹ I use the term situation here to refer to any event, state, occurrence etc referred to by the sentence.

the structures which have the Macro Event Property are exactly those where the situational aspectual information of the individual atoms combines into units which interact on a larger discourse level. This hypothesis requires further testing, though, and is well beyond the scope of this thesis. Thus to avoid entering into this issue I only consider single verb sentences which satisfy the Macro Event Property and have no subparts which also have this property.

Some researchers, such as Binnick (1991), consider situational aspect classes to be based on a basic set of semantic differences between situations and thus largely unvarying cross-linguistically. While I agree that situational aspect classes are motivated by semantic distinctions, I believe that they can and do vary cross-linguistically and must therefore be grammatically motivated by language internal differences. Thus in Section 3.2 I describe the method I have used to test for grammatical differences which distinguish the situational aspect classes of Avatime. The next four sections detail the results of these tests: Section 3.3 gives the results of tests involving mood, Section 3.4 gives the results of tests involving viewpoint aspect, Section 3.5 gives the results of tests involving temporal adverbials, and Section 3.6 summarises the classes found and their grammatical and semantic properties. In Section 3.7, I compare the Avatime classes with classes found in other languages and with situational aspect theory in general. Finally I give a brief conclusion in Section 3.8.

3.2 Method of Investigation

The common Vendler classification of English verb phrases into four classes, activities, accomplishments, achievements and states², see example 1, (Vendler, 1957), was used to aid the selection of a sample of Avatime sentences that would cover a wide range of situational aspect classes. 28 Avatime sentences were chosen, which translated into English sentences with verb phrases from each of the four Vendler classes (examples 2-28). This method of sample construction was used to ensure variation and not in order to find direct translational comparisons between Avatime situational aspect properties and the Vendler classes. Therefore I will not discuss the Vendler classes again until the comparison in Section 3.7.1.

- | | |
|-----------------|---|
| 1. activities | run, walk, swim, draw, drive a car |
| accomplishments | run a mile, walk home, swim 500 metres, paint a picture |
| achievements | find, notice, solve the puzzle, win the race, die, stop |
| states | desire, want, love, hate, be red, know |

Sentences which translate into English activities:

2. *a-dò*
 C1S-sleep
 ‘He slept.’ or ‘He fell asleep.’
(R11251_AB)

3. *a-ta* *kijimij*
 C1S-eat rice
 ‘He ate rice.’
(R11231_MM)

² In order to avoid confusion, I will refer to the Vendler classes all in lower case and the Avatime classes with initial capitalisation.

4. *dzeni a-dɔ*
rain C1S-land
'It rained.'

(R11171_SO)

Sentences which translate into English accomplishments:

5. *a-ba*
C1S-come
'He came.'

(R11253_MM)

6. *a-dra o-popo-lo*
C1S-open C2S-door-DEF
'He opened the door.'

(R11181_AB)

7. *a-dzɛ*
C1S-go
'He went.'

(R11253_MM)

8. *a-ŋa koranti-e*
C1S-eat banana-DEF³
'He ate the banana.'

(R11181_AB)

9. *a-trɛ ní Oholo*
C1S-go LOC Ho
'He went to Ho.'

(R11271_MM)

10. *e-dzi*
C1S-return
'He returned.'

(R11253_MM)

11. *e-si lị-gba-lɛ*
C1S-paint C3S-house-DEF
'He painted the house.'

(R11181_AB)

12. *o-mwe-no ê-wɔlị*
C2S-orange-DEF C2S-fall
'The orange fell.'

(R11191_AB)

³ Note here that in English the definite object makes this an accomplishment rather than an activity (compare example 3).

Sentences that translate into English achievements:

13. *ma-mɔ bɛ*
1S-see C4P

‘I saw/found them.’ ‘*I looked at them.’

(R11171_SO)

14. *a-sa yɛ*
C1S-hit C1S

‘He hit him.’

(R11231_MM)

15. *a-trɔ si yáà-kla ke-plikpa li-ya*
C1S-promise COMP C1S.LOG:POT-read C6S-book C3S⁴-this

‘He promised to read this book.’

(R11241_WO)

Sentences which are translated into English states

16. *e-keme*
C1S-become.big

‘He is big.’

(R11171_SO)

17. *e-pe*
C1S-tire

‘He is tired.’

(R11171_SO)

18. *e-tse*
C1S-die

‘He is dead.’ or ‘He died.’

(R11171_SO)

19. *kani-e a-su*
light-DEF C1S-be.lit

‘The light is on.’

(R11231_MM)

20. *ku-sa-a kɔ-lì kpekpe*
C5S-cloth-DEF C5S-be.at black

‘The cloth is black.’

(R11231_MM)

⁴ Note that often Class 6 singular nouns take Class 3 singular agreement on demonstratives, this could be a speech error but it seems to happen remarkably often and regularly. More research needs to be done to determine the cause.

21. *me-te bε*
1S-know C4P
'I know it.'
- (R11171_SO)
22. *o-di ke-se-a*
C1S-sit C6S-ground-DEF
'He is seated on the ground.'
- (R11231_MM)
23. *ō-nū ōdōbàsī*
C1S-be teacher
'He is a teacher.'
- (R11253_MM)
24. *ɔ-lì ní ɔvanɔ*
C1S-be.at LOC Vane
'He is in Vane.'
- (R11171_SO)
25. *ɔ-nìvɔ-ε ɔkpasi ní ka-so-ya mε*
C1S-child-DEF C1S-be.in LOC C6S-basket-DEF in
'The child is in the basket.'
- (R11271_MM)
26. *ɔ-nìvɔ-ε ɔsunu ní o-se-lo mε*
C1S-child-DEF C1S-hang LOC C2S-tree-DEF in
'The child is hanging in the tree.'
- (R11271_MM)
27. *ɔ-nìvɔ-ε ɔtìjì ní ka-so-ya aba*
C1S-child-DEF C1S-be.on LOC C6S-basket-DEF on
'The child is standing on the basket.'
- (R11271_MM)
28. *o-popo-lo è-dra*
C2S-door-DEF C1S-open
'The door is open.'
- (R11181_AB)
29. *a-pε si yì-yɔ li-vuni*
C1S-want COMP C1S.LOG.SBJV-dance C3S-dance
'He wants to dance.'
- (R11241_WO)

Each of these sentences was then tested with two native speakers for compatibility and interpretation differences with each of the Avatime TAM categories and each of a set of temporal adverbials: the adverbs *koko* 'already', *tsyitsya* 'quickly', *blewu* 'slowly' and *taba* 'twice'; the noun phrase *nyasasa tole*, 'for one hour'; and the prepositional phrase *ní nyasasa tole me* 'in one hour'. These adverbials were chosen either because they are

commonly used in tests of situational aspect classes, for example (*ni*) *nyɔsasa tole (me)* ‘in/for one hour’, and *tsyitsya* ‘quickly’, or because they are very commonly used temporal adverbials in Avatime, for instance *taba* ‘twice’. It was hoped that this group of adverbials would show some differences in behaviour depending on which sentence they occurred with, thus showing some of the properties of the Avatime situational aspect classes. It is undoubtable that there are many other temporal adverbials which would be interesting to study in this context, however due to time restrictions it was not possible to test more.

Sasse (2002) has pointed out that the common practice of testing situational aspect properties with temporal adverbials is potentially problematic because the temporal adverbial changes the situational aspect properties of the sentence to which it is added. This is indeed an issue which needs to be considered when conducting situational aspect tests with adverbials. However, I believe that if you only consider the combinational properties of the adverbial with the clause you are testing, rather than looking at the behaviour of the resulting clause, you gain useful information about the situational aspect properties of the original clause without the adverbial. For instance, one gains important information about the clauses *the bomb exploded* and *he ran* from the fact that the former is at least rather odd when modified by *for an hour* but the latter is fine. Of course the resulting sentence *he ran for an hour* has different temporal properties than the original sentence *he ran*, but this difference is not relevant for the comparison between the original two clauses *the bomb exploded* and *he ran*.

3.3 Mood

There were no systematic differences in the behaviour of the sentences in the potential and subjunctive moods, which correlated with temporal information. This is not surprising given that mood generally relates to the speaker’s opinion of the likelihood of the situation rather than to its internal temporal properties. Thus, sentences expressing situations with different internal temporal properties would be expected to behave similarly in each mood.

3.4 Aspect

3.4.1 Aorist

The clearest difference among the sentences in my sample is the interpretation they get in the aorist aspect. While, given the right context, all sentences in the aorist can be interpreted as referring to situations in the past, present or future, the default interpretation varies according to the sentence’s situational aspect properties.

The sentences which get a default past interpretation are examples 2-14, repeated here as 30:

30. <i>aba</i>	‘He came.’	(example 5)
<i>adɔ</i>	‘He slept.’	(example 2)
<i>adra opopolo</i>	‘He opened the door.’	(example 6)
<i>adzɛ</i>	‘He went.’	(example 7)
<i>aŋa korantie</i>	‘He ate the banana.’	(example 8)
<i>asa yɛ</i>	‘He hit him.’	(example 14)
<i>ata kɪmɪmɪ</i>	‘He ate rice.’	(example 3)
<i>atrɛ nɪ Oholo</i>	‘He went to Ho.’	(example 9)
<i>dzeni adɔ</i>	‘It rained.’	(example 4)
<i>edzi</i>	‘He returned.’	(example 10)

<i>esi liḡbale</i>	‘He painted the house.’	(example 11)
<i>mamɔ be</i>	‘I saw/found them’	(example 13)
<i>omweno èwɔli</i>	‘The orange fell.’	(example 12)

The sentences which receive a default present interpretation are examples 16-29 above, repeated here as 31:

31. <i>ekeme</i>	‘He is big.’	(example 16)
<i>epe</i>	‘He is tired.’	(example 17)
<i>etse</i>	‘He is dead.’	(example 18)
<i>kane asu</i>	‘The light is on.’	(example 19)
<i>kusa kolì kpekpe</i>	‘The cloth is black.’	(example 20)
<i>mete be</i>	‘I know it.’	(example 21)
<i>odi kesa</i>	‘He is seated on the ground.’	(example 22)
<i>ōnū òdòbàsī</i>	‘He is a teacher.’	(example 23)
<i>ɔli ní ɔvanɔ</i>	‘He is in Vane.’	(example 24)
<i>ɔnyɔe ɔkpasi ní kasoya me</i>	‘The child is in the basket.’	(example 25)
<i>ɔnyɔe ɔsunu ní osele me</i>	‘The child is hanging in the tree.’	(example 26)
<i>ɔnyɔe ɔini ní kasoya aba</i>	‘The child is standing on the basket.’	(example 27)
<i>opopolo èdra</i>	‘The door is open.’	(example 28)
<i>ape si yiyo livuni</i>	‘He wants to dance.’	(example 29)

Note that example 15, *atrɔ si yáàkla keplikpa liya* ‘He promised to read this book.’, was equally often translated in the past and the present.

Here you can see a clear pattern where all the sentences which translate to English states have a default present reading in the aorist, while all the sentences which translate to English non-states have a default past reading. This default time reference pattern in the aorist is extremely common in the region and seems to be a regional phenomenon (Welmers, 1973). It is in fact this pattern co-occurring with the unmarked form of the verb that is used to define the aorist aspect, so this is definitely not a new phenomenon. It does, however, give us a clear motivation to separate Avatime sentences into two situational aspect classes, determined by their behaviour in the aorist.

There is only one case, example 15, which does not fit into either group because, at least in this testing, it is just as likely to be interpreted in the past as it is to be interpreted in the present. This sentence can also be seen to have some properties of states and achievements, it can be seen to be the punctual act of promising or it can also be viewed as the state that you enter into of having promised. Thus it is not wholly surprising that this sentence would occur with both interpretations. We will have to see how it behaves in later tests in order to determine to which of these classes, if either, it belongs.

Table 1: Summary of Avatime situational aspect classes and their behaviour at this point

Situational Aspect Class	Aorist
Class 1	past
Class 2	present

3.4.2 *Habitual*

All sentences in my sample can occur in the habitual, except for example 23, *ōnū ōdōbàsī* ‘he is a teacher’. This is not a surprising exception as being a teacher is not normally something that someone would do habitually. Possibly more surprising is that example 18, *etse* ‘he is dead’, can occur in the habitual (example 32) with the meaning ‘he is normally sick’. This apparent discrepancy is explained when you see that *tse* ‘die’ actually refers to the change of state rather than to the final end result, as I shall show later in this chapter. Thus it is perfectly reasonable for someone to be habitually in the process of dying but it is still surprising for someone to habitually be a teacher, unless they were an actor⁵.

32. *i-ze-tse*

C1S-HAB-die

‘He is normally sick.’

(R11171_SO)

There was variation in the English translation of many sentences from both Class 1 and 2 in the habitual. Some of these were translated as ‘used to do X’, while others were translated as ‘always do X’. However, I do not believe that this difference in translation reflects a real difference in meaning. Firstly, some sentences were translated in both ways during the testing (examples 33 and 34). Secondly, there is not normally a distinction between past and present habitual in Avatime and sentences will be interpreted in either way depending on the context. Thirdly, the way that this difference patterns does not match any other grouping found during this testing or seem to follow any noticeable semantic difference. Finally, this interchangeability is also found in the English speech of Avatime native speakers. All of these facts taken together indicate that the alternation between the ‘used to do X’ and ‘always do X’ translations is not a meaningful alternation and probably reflects an ambiguity in tense.

33. *i-ze-do*

C1S-HAB-sleep

‘He used to sleep.’

(R11181_AB)

34. *i-ze-do*

C1S-HAB-sleep

‘He always sleeps.’

(R11251_AB)

3.4.3 *Progressive*

One of the standard situational aspect tests used in Indo-European languages is whether or not a verb can occur in the progressive. This distinguishes stative sentences, which cannot normally occur in this aspect, from other sentences, which can. It also distinguishes achievement sentences, which typically receive an iterative interpretation in the progressive,

⁵ Note that because I later claim that *etse* is one of a class of clauses which are distinguished by the fact that the changes they encode are irreversible, it is actually still strange that these verbs can occur in the habitual. However, it seems that as with *etse* whenever they occur in the habitual it is the change which occurs repeatedly. An end-point is never reached and so the change is free to occur again or continue to occur. It is only when these clauses occur in the aorist that they are interpreted as completed irreversible changes, which cannot be repeated.

from activity and accomplishment sentences, which typically receive an ongoing action interpretation.

One might expect, given the common Indo-European pattern, that Class 2 Avatime sentences would not be able to occur in the progressive. However, all the sentences in my sample can be put into the progressive, though in some cases a suppletive verb form is used, which I will discuss later. Sentences can be grouped, however, by the different interpretations they receive in this aspect

Most Class 1 sentences get a standard ‘in progress’ reading, with a default present time reference interpretation (examples 35-44)

35. *dzeni* *èé-dɔ*
rain C1S:PROG-land
‘It is raining.’
(R11171_SO)
36. *èé-dɔ*
C1S:PROG-sleep
‘He is sleeping.’
(R11181_AB)
37. *èé-dra* *o-popo-lo*
C1S:PROG-open C2S-door-DEF
‘He is opening the door.’
(R11181_AB)
38. *èé-dzi*
C1S:PROG-return
‘He is returning.’
(R11253_MM)
39. *èé-ŋa* *koranti-e*
C1S:PROG-eat banana-DEF
‘He is eating the banana.’
(R11271_MM)
40. *èé-si* *lì-ɠba-lɛ*
C1S:PROG-paint C3S-house-DEF
‘He is painting the house.’
(R11181_AB)
41. *èé-ta* *kìmjìmjì*
C1S:PROG-eat rice
‘He is eating rice.’
(R11231_MM)

42. *èé-trɛ* *nĩ* *Oholo*
 C1S:PROG-go LOC Ho
 ‘He is going to Ho.’
 (R11271_MM)

43. *mèé-mɔ* *bɛ*
 1S:PROG-see C4P
 ‘I am seeing it.’
 (R11171_SO)

44. *o-mwe-no* *èé-wɔli*
 C2S:orange-DEF C2S:PROG-fall
 ‘The orange is falling.’
 (R11191_AB)

Some Class 1 sentences get a habitual or iterative interpretation (examples 45-47). This difference likely indicates another situational aspect class, unless we later find substantial evidence for these sentences not grouping together.

45. *èé-sa* *yɛ*
 C1S:PROG-hit C1S
 ‘He is hitting him.’
 (R11231_MM)

46. *èé-ba*
 C1S:PROG-come
 ‘He comes often.’
 (R11253_MM)

47. *èé-dzɛ*
 C1S:PROG-go
 ‘He goes often.’
 (R11253_MM)

Class 2 sentences also split into two groups, with one group receiving an inchoative reading in the progressive (examples 48-53) and the remainder of the Class 2 sentences and *atrɔ si yáàkla keplikpa liya* ‘He promised to read this book.’ receiving a ‘persistent present’ reading (examples 54-62).

48. *èé-keme*
 C1S:PROG-become.big
 ‘He is becoming big.’
 (R11171_SO)

49. *èé-pe*
 C1S:PROG-tire
 ‘He is tiring.’
 (R11171_SO)

50. *èé-tse*
C1S:PROG-die
'He is sick/dying.'
(R11171_SO)
51. *ku-sa-a* *kèé-ze* *kpekpe*
C5S-cloth-DEF C5S:PROG-be black
'The cloth is getting black/dirty.'
(R11231_MM)
52. *o-popo-lo* *èé-dra*
C2S-door-DEF C1S:PROG-open
'The door is opening.'
(R11181_AB)
53. *mèé-te* *bε*
1S:PROG-know C4P
'I'm getting to know it.'
(R11171_SO)
54. *èé-pε* *si* *yì-yɔ* *li-vuni*
C1S:PROG-want COMP C1S.LOG.SBJV-dance C3S-dance
'He still wants to dance.'
(R11241_WO)
55. *èé-trɔ* *si* *yáà-kla* *ke-plikpa* *li-ya*
C1S:PROG-promiseCOMP C1S.LOG:POT-read C6S-book C3S-this
'He promised to read this book.'
(R11241_WO)
56. *èé-ze* *ke-se-a*
C1S:PROG-be C6S-ground-DEF
'He is still sitting on the ground'
(R11231_MM)
57. *èé-ze* *oḍobàsī*
C1S:PROG-be teacher
'He is still a teacher.'
(R11253_MM)
58. *èé-ze* *nĩ* *Ḍvanɔ*
C1S:PROG-be LOC Vane
'He is still in Vane.'
(R11171_SO)
59. *kani-e* *èé-su*
light-DEF C1S:PROG-be.lit
'The light is still on.'
(R11231_MM)

60. *ɔ-nivɔ-ε* *èé-ze* *ní* *ka-so-ya* *mε*
 C1S-child-DEF C1S:PROG-be LOC C6S-basket-DEF in
 ‘The child is still in the basket.’
 (R11271_MM)
61. *ɔ-nivɔ-ε* *èé-ze* *ní* *o-se-lo* *mε*
 C1S-child-DEF C1S:PROG-be LOC C2S-tree-DEF in
 ‘The child is still in the tree.’
 (R11271_MM)
62. *ɔ-nivɔ-ε* *èé-ze* *ní* *ka-so-ya* *aba*
 C1S-child-DEF C1S:PROG-be LOC C6S-basket-DEF on
 ‘The child is still on the basket.’
 (R11271_MM)

As you can see in the above examples, many verbs that occur in this second group are replaced with a suppletive verb form *zè* ‘be’ when they occur outside of the aorist aspect. These verbs are the copula verbs *lí* ‘be at’ and *nū* ‘be’ and the positional verbs *dí* ‘sit’, *kpàsī* ‘be in’, *sūnū* ‘hang’ and *tīnī* ‘be on’. All these verbs also take subject agreement markers from Set 2 rather than Set 1. This clearly marks these verbs as a separate group within Avatime, though how it relates to the situational aspect classes remains to be seen. It is clear that this group is contained within one situational aspect class, but from the data available at present it seems that this class has other members: the three sentences 54, 55 and 59. It is possible that the copulas and positionals form a distinct sub class but it is also possible that their grammatical differences have a non-temporal basis. It is worth pointing out here that at least the copula verb *lí* ‘be at’ can occur in sentences which lie in different classes depending on the object, as can be seen in example 20 and 51 where the progressive sentence clearly has an inchoative interpretation, thus placing the sentence in a different class. This indicates that while these verbs may have some temporal properties, which cause the sentences which contain them to group together in this ‘persistent present’ progressive class, these temporal properties do not preclude them forming part of a sentence in some other situational aspect class.

The progressive separates Avatime sentences into four groups depending on their interpretation. There are also similarities in the internal temporal properties of the situations described by the sentences in each group. So this is a strong motivation for making each of these groups a separate situational aspect class. Class 1 sentences are split into Class A, which get a standard ‘in progress’ interpretation, and Class B, which get an iterative interpretation. Class A sentences all express a dynamic situation with some duration, which may be temporally bounded (such as examples 38, 40 & 42) or unbounded (such as examples 35, 36 & 41). Class B sentences all express a change of state. Class 2 as defined earlier by the behaviour in the aorist is similarly split into two classes. Class C sentences get an inchoative interpretation and Class D sentences get a persistent present interpretation.

It is also possible to see how the temporal features of these sentences would cause the different interpretations. An in progress reading is only possible if there is some type of action and if that action has duration. If an action lacks duration it can not be currently in progress unless it is being repeated, hence the iterative interpretation. If a change of state is in progress then by definition you get the inchoative reading so Class C and Class A are actually very similar in their interpretations here, though they are distinguished by their behaviour in the

orist. Finally if there is no action at all then the action cannot be in progress, the most natural extension is to say that the state is in progress implying that the state also held prior to the topic time and hence it is persistent. This quick overview shows that the interpretations found here are in accordance with the perceived temporal properties of the classes. I shall discuss the semantics of the progressive aspect and its possible interpretations in more detail in Chapter 4.

Thus I conclude this section on aspect with four situational aspect classes determined by their behaviour in the orist and progressive aspects (Table 2). In the next section I will show the behaviour of these classes when combined with temporal adverbs, this will strengthen the claim that these are in fact situational aspect classes with distinct grammatical behaviours and also shed more light on the classes' temporal properties.

Table 2: Summary of the behaviour of Avatime situational aspect classes in all basic aspects

Situational Aspect Class	Aorist	Habitual	Progressive
Class A	past	✓	in progress
Class B	past	✓	iterative
Class C	present	✓	inchoative
Class D	present	✓	persistent

3.5 Temporal Adverbials

3.5.1 *Already*

All the sentences in my sample can occur with *koko* 'already', always receiving the 'situation has already occurred' interpretation. This lack of variation shows that this adverbial is not relevant for distinguishing the situational aspect differences found within my sample.

3.5.2 *In one hour vs. for one hour*

The *in x time vs. for x time* test is a standard test used in situational aspect studies to distinguish telic and atelic situations. Atelic situations can be modified by *for x time* but not by *in x time*, conversely telic situations can be modified by *in x time* but are at least questionable when modified by *for x time*.

This test is not straightforward in Avatime, because there is no good translation for *in/for x time*. Examples 63 and 64 are normally given as the Avatime translations of English 'for one hour' and 'in one hour' respectively, however they both cover a wide range of very similar meanings. Each phrase can be translated into English 'for one hour', 'in one hour', 'within one hour' and 'one hour ago'. The only difference in range of translation between the two phrases is that 63 can mean 'at one o'clock' whereas, in this usage, 64 has a less exact 'around one o'clock' meaning. Other *in/for x time* expressions are formed in the same way and have similarly broad semantic ranges, at least when compared to English. The subtle difference in meaning and usage between these two phrases would be an interesting area for further study, however such an investigation is beyond the scope of this thesis. For the current purposes it is sufficient to know that the usage and range of interpretation of such expressions vary according to the clause they modify and this makes the test useful.

63. *ɔ-nyɔ-sa-sa* *to-le*
 C2S-bell-hit-REDUP C2S-one
 ‘for one hour’, ‘in one hour’, ‘within one hour’, ‘one hour ago’ and ‘at one o’clock’

64. *ní* *ɔ-nyɔ-sa-sa* *to-le* *me*
 LOC C2S-bell-hit-REDUP C2S-one in
 ‘in one hour’, ‘for one hour’, ‘within one hour’, ‘one hour ago’ and ‘around one o’clock’

The only class which behaves in a consistent way in this test is Class B. No sentences in this class can occur with either the ‘for one hour’ or ‘in one hour’ interpretation. Given the apparent lack of duration of these situations it is not surprising that the ‘for one hour’ interpretation would not be allowed. It is slightly surprising that the ‘in one hour’ interpretation would also be disallowed, however as we do not have enough information on the semantics of these two phrases there may be some other restriction which is coming into play.

The sentences in Class A fall into three groups. The majority of the sentences can occur with either interpretation. Two sentences (examples 65 and 66) are limited to the ‘in one hour’ interpretation. As these are telic situations this may be showing a distinction in Avatime between telic and atelic situations, however another apparently telic situation (example 67) has the opposite restriction allowing the ‘for one hour’ but not the ‘in one hour’ interpretation. Thus while it would be interesting to do further study to see if this difference does relate to telicity, there is not yet enough evidence to make that claim. It is also quite possible that my consultants were not very clear on the meanings of the English phrases ‘in/for one hour’ and thus small variation in this area may not be meaningful.

65. a. *e-si* *li-gba-le* *ɔ-nyɔ-sa-sa* *to-le*
 C1S-paint C3S-house-DEF C2S-bell-hit-REDUP C2S-one
 ‘He painted the house in one hour.’

b. *e-si* *li-gba-le* *ní* *ɔ-nyɔ-sa-sa* *to-le* *me*
 C1S-paint C3S-house-DEF LOC C2S-bell-hit-REDUP C2S-one in
 ‘He painted the house in one hour.’

(R11181_AB)

66. a. *a-trɛ ní* *Oholo* *ɔ-nyɔ-sa-sa* *to-le*
 C1S-go LOC Ho C2S-bell-hit-REDUP C2S-one
 ‘He went to Ho in one hour.’

b. *a-trɛ ní* *Oholo ní* *ɔ-nyɔ-sa-sa* *to-le* *me*
 C1S-go LOC Ho LOC C2S-bell-hit-REDUP C2S-one in
 ‘He went to Ho in one hour.’

(R11271_MM)

67. a. *e-dzi* *ɔ-nyɔ-sa-sa* *to-le*
 C1S-return C2S-bell-hit-REDUP C2S-one

‘He returned for one hour.’ (meaning after one hour he moved in another direction, he may or may not have reached the place he was returning to)

- b. *e-dzi ní ɔ-nyɔ-sa-sa to-le me*
 C1S-return LOC C2S-bell-hit-REDUP C2S-one in
 ‘He returned one hour ago’ (it cannot mean it took him one hour to return)
 (R11253_MM)

The sentences in Class C also fall into three groups. The majority can again occur with both interpretations (for instance example 68). Note that the sentences in this class also take on an inchoative reading when modified by ‘in one hour’. This is further evidence that it is the change of state that is in focus in these situations, rather than the resulting state. Also as in Class A, two sentences are limited to the ‘in one hour’ interpretation (examples 69 and 70). There is also one sentence which was ungrammatical with either adverbial, likely because the present specification contained in *li* ‘be.at’ is incompatible with these temporal adverbials (example 71). As in Class A, there does not seem to be enough evidence to determine the reason behind these variations, because in both classes the majority of sentences can occur with both interpretations. I will, therefore, code both these classes as allowing both interpretations, though there are some restrictions.

68. a. *e-tse li-we ti-ta*
 C1S-die C3S-day C3S-three
 ‘He was dead for three days.’ (acceptable when ‘he’ is Jesus)

- b. *e-tse ní li-we ti-ta me*
 C1S-die LOC C3S-day C3S-three in
 ‘He died in three days.’

(R11171_SO)

69. a. *e-keme ɔ-nyɔ-sa-sa to-le*
 C1S-be.big C2S-bell-hit-REDUP C2S-one
 ‘He became big in one hour.’

- b. *e-keme ní ɔ-nyɔ-sa-sa to-le me*
 C1S-be.big LOC C2S-bell-hit-REDUP C2S-one in
 ‘He became big in one hour.’

(R11171_SO)

70. a. *e-pe ɔ-nyɔ-sa-sa to-le*
 C1S-tire C2S-bell-hit-REDUP C2S-one
 ‘He became tired in one hour.’

- b. *e-pe ní ɔ-nyɔ-sa-sa to-le me*
 C1S-tire LOC C2S-bell-hit-REDUP C2S-one in
 ‘He became tired in one hour.’

(R11171_SO)

71. a. **ku-sa-a kɔ-li kpekpe ɔ-nyɔ-sa-sa to-le*
 C5S-cloth-DEF C5S-be.at black C2S-bell-hit-REDUP C2S-one
 ‘The cloth is black for one hour.’

- b. **ku-sa-a* *kɔ-lɨ* *kpekpe ní* *ɔ-nyɔ-sa-sa* *to-le* *me*
 C5S-cloth-DEF C5S-be.at black LOC C2S-bell-hit-REDUP C2S-one in
 ‘The cloth became black in one hour.’

(R11231_MM)

The final class, Class D, divides into two groups. The two complex clauses do not allow either interpretation to modify the main verb, however both are allowed for the subordinate clause (example 72). This seems to be due to their syntactic properties rather than to any semantic incompatibilities. The rest of the sentences allow both interpretations, though the copula and positional verbs must take the suppletive *zè* ‘be’ form for the ‘for one hour’ reading (examples 73 and 74). This is because stating the duration of the time implies that the time has already past, otherwise you would not know its duration. This pattern can also be seen in the Class C sentences above, though it is more noticeable here because the past time reference requires the use of the suppletive *zè* form of the copula⁶. So with the exception of the complex clauses, there is a clear pattern where sentences in this class can be modified by either ‘in one hour’ or ‘for one hour’.

72. *a-pɛ* *si* *yɨ-yɔ* *li-vuni* *ɔ-nyɔ-sa-sa* *to-le*
 C1S-want COMP C1S.LOG.SBJV-dance C3S-dance C2S-bell-hit-REDUP C2S-one
 ‘He wants to dance for/in one hour.’ (It cannot mean that the wanting lasted for one hour or that it began in one hour)

(R11241_WO)

73. a. *kani-e* *a-su* *ní* *ɔ-nyɔ-sa-sa* *to-le* *me*
 light-DEF C1S-be.lit LOC C2S-bell-hit-REDUP C2S-one in
 ‘The lights were on in one hour.’

- b. *kani-e* *a-su* *ɔ-nyɔ-sa-sa* *to-le*
 light-DEF C1S-be.lit C2S-bell-hit-REDUP C2S-one
 ‘The lights were on for one hour.’

(R11231_MM)

74. a. *ɔ-lɨ* *ní* *ɔvanɔ ní* *ɔ-nyɔ-sa-sa* *to-le* *me*
 C1S-be.at LOC Vane LOC C2S-bell-hit-REDUP C2S-one in
 ‘He is in Vane in one hour.’ (meaning it took him one hour to get there and he is still there)

*‘He is in Vane for one hour.’

- b. *o-ze* *ní* *ɔvanɔ* *ɔ-nyɔ-sa-sa* *to-le*
 C1S-be LOC Vane C2S-bell-hit-REDUP C2S-one
 ‘He was in Vane for one hour.’

(R11231_MM)

⁶ Note that here it seems that the non-suppletive forms can only be used in the present, but elsewhere I have examples of them occurring in reference to past situations (see Section 2.5). Thus while I think this is the most likely explanation for this phenomenon it requires further investigation.

Table 3: Summary of the behaviour of situational aspect classes up to this point

Class	Aor.	Hab.	Progressive	Already	for one hour	in one hour
A	past	✓	in progress	✓	(✓)	(✓)
B	past	✓	iterative	✓	✗	✗
C	present	✓	inchoative	✓	(✓)	(✓)
D	present	✓	persistent	✓	✓	✓

Note: brackets indicate variation in behaviour.

3.5.3 Quickly and slowly

Modification by ‘quickly’ and ‘slowly’ is another commonly used situational aspect test which is slightly more complicated in Avatime. The Avatime words *tsyitsya* ‘quickly’ and *blewuu* ‘slowly’ are ideophones and as such have a very rich semantics and so they can have highly idiosyncratic interpretations in some contexts (for instance 75). However, if one considers only when the ‘quickly’ or ‘slowly’ interpretations are allowed then the test produces some interesting results.

75. *a-dɔ* *blewuu*
 C1S-sleep slowly
 ‘He slept restlessly.’

(R11251_AB)

Most sentences in Classes A and C can occur with *tsyitsya* and *blewuu* with the interpretations ‘quickly’ and ‘slowly’ respectively (for instance 76 & 77). Again you can see that this modification focuses on the change of state in Class C rather than the end state. There are however two sentences from each class (Class A: 78 & 79, Class C: 80 & 81) which allow ‘quickly’ but not ‘slowly’. It is not clear to me why these sentences in particular would not allow modification by ‘slowly’, especially as they allow ‘quickly’. It might be that there is some aspect of the semantics of *blewuu* that is not compatible with these sentences, but to confirm this theory we would need a much greater understanding of its semantics. So it seems that in general these classes allow modification by both ‘quickly’ and ‘slowly’ though there may be some restrictions on ‘slowly’.

76. *dzeni* *a-dɔ* *tsyitsya/blewuu*
 rain C1S-land quickly/slowly
 ‘The rain fell quickly/slowly.’

(R11171_SO)

77. *e-keme* *tsyitsya/blewuu*
 C1S-be.big quickly/slowly
 ‘He became big quickly/slowly.’

(R11171_SO)

78. a. *e-dzi* *tsyitsya*
C1S-return quickly
'He returned quickly.'

b. **e-dzi* *blewuu*
C1S-return slowly
'He returned slowly.'

(R11253_MM)

79. a. *ma-mɔ* *bɛ* *tsyitsya*
1S-see C4P quickly
'I saw it quickly.'

b. **ma-mɔ* *bɛ* *blewuu*
1S-see C4P slowly
'I saw it slowly.'

(R11171_SO)

80. a. *e-pe* *tsyitsya*
C1S-tire quickly
'He became tired quickly.'

b. **e-pe* *blewuu*
C1S-tire slowly
'He became tired slowly.'

(R11171_SO)

81. a. *e-te* *tsyitsya*
C1S-know quickly
'He learns quickly.'

b. **e-te* *blewuu*
C1S-know slowly
'He learns slowly'

(R11171_SO)

In contrast, no sentences in Classes B or D can occur with *tsyitsya* or *blewuu* and receive the interpretations 'quickly' or 'slowly' (examples 82 and 83). This is not at all surprising because the sentences in Class D express states with no internal change and thus it makes no sense to specify the speed of the change. For Class B this restriction is also not unexpected, but in this case it is due to the lack of duration rather than the lack of change, if a change has no duration then it makes no sense to talk about its speed.

82. *a-ba* *tsyitsya/blewuu*
C1S-come quickly/slowly
'He came early/late.' (It cannot mean 'He came quickly/slowly.')

(R11251_AB)

83. *o-di ke-se-a tsyitsya/blewuu*
 C1S-sit C6S-ground-DEF quickly/slowly
 ‘He sat down early/reluctantly.’ (It cannot mean ‘He sat down quickly/slowly.’)
 (R11231_MM)

Table 4: Summary of the behaviour of situational aspect classes in Avatime

Class	Aor.	Hab.	Progressive	Already	For one hour	In one hour	Quickly	Slowly
A	past	✓	in progress	✓	(✓)	(✓)	✓	(✓)
B	past	✓	iterative	✓	✗	✗	✗	✗
C	present	✓	inchoative	✓	(✓)	(✓)	✓	(✓)
D	present	✓	persistent	✓	✓	(✓)	✗	✗

Note: brackets indicate variation in behaviour.

3.5.4 *Twice*

All sentences in Classes A, B and D can occur with *taba* ‘twice’. Though this modification implies non-present time reference and so the copula and positional verbs must be replaced by the suppletive copula *zè* ‘be’.

The sentences in Class C do not behave as consistently. Four cannot occur with *taba* ‘twice’ (examples 84-87). These exceptions are not surprising, in fact it would have been more surprising if ‘He died twice.’ was a perfectly acceptable sentence. It is interesting to contrast these exceptions to the two sentences from this class which can take *taba* ‘twice’ (examples 88 & 89). The most notable difference between the groups is that sentences with human subjects do not allow ‘twice’ and those with inanimate subjects do. This does not seem to be a good motivation for the distinction, however. In fact I can see no likely motivation for this distinction, because if 88 is acceptable then I see no reason for 84 and 87 to be unacceptable as all three would require the end state to be reached and then altered and then reached again. Unfortunately I think we will need to wait for further data before we can solve this mystery. At present all we can say is that most often Class C sentences do not allow ‘twice’ though there are some exceptions.

84. **e-pe taba*
 C1S-tire twice
 ‘He was tired twice.’
 (R11171_SO)

85. *e-te taba*
 C1S-know twice
 ‘He knew it after the second repetition.’
 (R11171_SO)

86. **e-tse taba*
 C1S-die twice
 ‘He died twice.’
 (R11171_SO)

87. **e-keme taba*
 C1S-be.big twice
 ‘He was big twice.’

(R11171_SO)

88. *ku-sa-a kɔ-lj kpekpe taba*
 C5S-cloth-DEF C5S-be.at black twice
 ‘The cloth was black twice.’

(R11231_MM)

89. *o-popo-lo è-dra taba*
 C2S-door C2S-open twice
 ‘The door opened twice.’

(R11181_AB)

Table 5: Summary of the behaviour of situational aspect classes in Avatime

Class	Aor.	Progressive	Already	For one hour	In one hour	Quickly	Slowly	Twice
A	past	in progress	✓	(✓)	(✓)	✓	(✓)	✓
B	past	iterative	✓	✗	✗	✗	✗	✓
C	present	inchoative	✓	(✓)	(✓)	✓	(✓)	(✗)
D	present	persistent	✓	✓	(✓)	✗	✗	✓

Note: brackets indicate variation in behaviour.

3.6 The situational aspect classes of Avatime and their semantics

I have found four situational aspect classes in Avatime, defined by their behaviour in the aorist and progressive aspects. However, as you can see from Table 5 and the discussion above, almost all of these classes behave inconsistently with most of the adverbs tested. The only class that behaves consistently with all adverbs is the smallest class, Class B. There are also only two adverbs, *koko* ‘already’ and *tsyitsya* ‘quickly’, which have consistent behaviour in all the situational aspect classes. Thus, it is worth questioning whether this is the optimal classification for these Avatime sentences. This question is quickly resolved when you notice that a reclassification based on behaviour in any of the adverbial tests results in a decrease rather than an increase in consistency. Furthermore, there are possible explanations for the inconsistencies found in the ‘for/in one hour’ and the ‘slowly’ adverbial tests, but there are no such explanations for the inconsistencies in behaviour in the aorist and progressive that would be caused by adopting a different system of classification. Thus while this classification system does have some inconsistencies, not all of which have likely avenues for explanation, it is the best way to classify these sentences based on the information currently available.

These four situational aspect classes have been defined solely by their grammatical properties. Each class does, however, also have distinctive semantic properties which can be seen in its behaviour in each test.

The situations in Class B all lack duration. This lack of duration can be seen in the iterative interpretation in the progressive and in the restriction on modification by *(ni) nyɔsasa tole (me)* ‘for/in one hour’, *tsyitsya* ‘quickly’ and *blewuu* ‘slowly’. Because there is no duration the progressive cannot have the typical ‘in progress’ reading and it also does not make sense

to talk about the length or speed of the situation. I will hence refer to this class as the Punctual class.

The situations in Class D are characterised by their lack of change. Thus it is also not possible to talk about the speed of the situation in this class and so modification by *tsyitsya* ‘quickly’ and *blewuu* ‘slowly’ is not allowed. The persistent present interpretation in the progressive is also consistent with the lack of change in these situations. The progressive aspect focuses on a time period within the situation and as there is no change in these situations this naturally gives the interpretation that the state existed previously and so is now persistent. I will thus refer to this class as the State class.

As discussed above, Class A contains situations with a change which is either terminal or not. This relatively unmarked semantics is evidenced by this class’ compatibility with all adverbs tested and the ‘normal’ interpretation in the progressive. From now on I shall refer to this as the Action class.

Class C behaves very similarly to the Action class, however there are significant differences. The inchoative interpretation in the progressive turns out to be equivalent to the in progress interpretation in the Action class when you consider the verbs in Class C to be inchoative rather than stative. The main difference between the two classes is the present versus past interpretation in the aorist. The sentences in this class have a very strong current end-state interpretation which can be cancelled only by extensive and elaborate prior context and is even then considered questionable. This persistent end-state and the inability to occur with *taba* ‘twice’ are explainable if you consider the changes in this class to be irreversible or uni-directional. This is an obvious assumption for sentences like *etse* ‘he died’ but less so for ones like *opopolo edra* ‘the door is open’. However, as has been argued previously by many other authors (for instance Klein, 1994) situational aspect semantics relates to the way a situation is grammaticalised in language and not necessarily the way it exists in reality. So while this class may have some unexpected members, for English speakers at least, it seems to be characterised semantically by uni-directional change. I shall thus refer to this class as the Uni-directional class.

Table 6: Summary of the behaviour of situational aspect classes in Avatime

Class	Aorist	Progressive	For one hour	In one hour	Quickly	Slowly	Twice
Action	past	in progress	(✓)	(✓)	✓	(✓)	✓
Punctual	past	iterative	✗	✗	✗	✗	✓
Uni-directional	present	inchoative	(✓)	(✓)	✓	(✓)	(✗)
State	present	persistent	✓	(✓)	✗	✗	✓

Note: brackets indicate variation in behaviour.

3.7 Theoretical and typological comparison

3.7.1 Theoretical comparison

There are many different systems of situational aspect theory. A thorough comparison of the system proposed here for Avatime to all, or even a relatively small sample, of the current general systems of situational aspect is well beyond the scope of this chapter. So I will limit the discussion here to a comparison to the Vendler system, as it is the most well known system that is also based primarily on grammatical properties of phrases rather than individual lexemes. The Vendler system was originally developed for English (Vendler, 1957) but it has since been used as a standard for work on situational aspect in Indo-European and even non-Indo-European languages, though its suitability for the latter has been questioned (Ebert & Zúñiga, 2001). Some might object to such a comparison because Vendler's system was designed for the inherent temporal properties of verbs while I have been examining the inherent temporal properties of sentences. However, Vendler's classes are generally applied to sentential categories as well (Binnick, 1991), thus I believe a comparison of the two systems is still interesting despite this difference. Vendler's system has been updated several times by many researchers (for instance Kenny, 1963, Verkuyl, 1973 and Mourelatos 1978), however the original Vendler categorisation seems to be the most common and so I will compare Avatime with the original version.

In many ways the Avatime situational aspect system is similar to the classic Vendler system. Both systems have a state class characterised semantically by a lack of change. The grammatical characteristics are slightly different, undoubtedly due to the different grammars of the languages in which they occur. The Vendler state class is normally characterised by an inability to occur in the progressive, though this test does not always work, or with adverbs of speed. In Avatime the sentences in the State class can all occur in the progressive though they are interpreted with a persistent present rather than the standard in progress reading. They do have the restriction against adverbs of speed, though, and given the semantics of this class I would be surprised if this was not a universal restriction for such a class.

The punctual event class is another class that both systems share, Punctual in Avatime and achievement in Vendler's terminology. Both classes are semantically characterised by a lack of duration of the event. In Avatime this class is grammatically characterised by an iterative interpretation in the progressive and the inability to occur with 'for one hour', 'in one hour', 'quickly' and 'slowly'. In the Vendler system this class is also grammatically distinguished by its iterative interpretation in the progressive and the inability to occur with 'for one hour', though this class can generally occur with 'in one hour', 'quickly' and 'slowly' in English.

The two systems of classification diverge more when you look at the remaining two classes. There is one class in Avatime which does not correspond to any class in the Vendler classification, namely the Uni-directional class. It is characterised semantically by a uni-directional change and grammatically by a strong present end-state interpretation in the aorist and the inability to occur with the adverb 'twice'. There is simply no corresponding class in the Vendler classification system and it seems that English does not make a grammatical distinction on the basis of uni-directionality of change.

The two remaining Vendler classes, action and accomplishment, are distinguished by a difference in telicity, however this distinction does not appear to be marked in Avatime and so these classes collapse into the one Action class in Avatime. This is notable because the

distinction between telic and atelic situations has been suggested to be one of the most fundamental situational aspect distinctions (Sasse, 2002) next to the distinction between states and non-states. While I have found no grammatical marking of this distinction in Avatime, it could be that there is some more subtle distinction that is not yet apparent. In Ewe, a nearby related language, telicity is also not obviously marked and according to Ameka (pers. com.) there are no situational aspect categories defined by this distinction. However, according to Essegbey (pers. com.) there are some subtle differences in interpretation possibilities of the ‘for/in one hour’ equivalent phrase with telic and atelic situations. So while the distinction may be a universal semantic difference it may turn out not to be universally grammatically relevant.

3.7.2 *Typological comparison*

The number of situational aspect classes varies greatly cross-linguistically, for instance Thai has two (Jenny, 2001) and Laz, a Kartvelian language spoken in Turkey, has seven (Mattissen, 2001). The semantic basis of the distinctions also varies. In Ewe the main distinction is made according to whether a situation is active or inchoative (Ameka, 2008) and in Thai the distinction is based on the punctuality of the situation. In Laz states and punctual situations are also distinguished but additional distinctions are made between telic and atelic situations and the rate and direction of change are also relevant for distinguishing situational aspect classes. So we can see that there is variation cross-linguistically both in number and type of situational aspect distinctions. It has been suggested that situational aspect systems are fairly similar within language families and that the major variations exist across language families (Ebert & Zúñiga, 2001), however to date there has been very little typological study of situational aspect and so the boundaries of this variation are unknown.

There are two languages in the Kwa family, other than Avatime, for which there is situational aspect information available. The more distantly related language Ewe has two major situational aspect classes, active and inchoative (Ameka, 2008), as noted above. This distinction is marked grammatically by the default time reference interpretation in the aorist. Inchoatives receive a default present reading and actives get a past reading. The inchoative class corresponds both semantically and grammatically to the Avatime Uni-directional class. It also contains a very small set of stative expressions, which may or may not be justifiable as a separate situational aspect class (Ameka, pers. com.). This set closely resembles the Avatime State class except that it appears to be of a much more limited size and potentially also less clearly grammatically distinguished. The active class of Ewe, like Avatime, contains both telic and atelic situations. However, according to Essegbey (pers. com.) there are some subtle differences in the interpretation of the ‘for/in one hour’ modification according to telicity, which may or may not support the distinction of separate situational aspect classes. Unlike Avatime there is no evidence for a class of punctual events. Thus the situational aspect systems of Ewe and Avatime are very similar in the type of distinctions made and in the way the classes are grammatically distinguished. They differ, however, in the number of classes distinguished, with Ewe lacking a punctual class and having only a marginal state class. The descriptions of both systems are still at a preliminary stage, however, and thus it is possible that they will be revised, especially in the number of classes, as more data becomes available.

Tuwuli is another Ghana Togo Mountain language, though spoken in an area fairly distant to Avatime. The situational aspect system has been described by Harley (2008) who used evidence from the interpretations in the progressive to justify a classic Vendlerian classification, rather than carrying out a more detailed independent grammatical investigation.

This methodology leads me to doubt some of Harley's findings; in particular the distinction between activities and accomplishments appears to be based solely on differences in the English translations. This lack of solid evidence for a telicity distinction adds strength to the apparent trend for Kwa languages to lack a grammatical telicity distinction. Like English and Avatime, Tuvuli has a separate class of punctual situations indicated by an iterative interpretation in the progressive. It also has a state class, which interestingly has many grammatical similarities to the copula and positional verbs in Avatime. All sentences in the Tuvuli state class cannot occur with any TAM category other than the unmarked aorist. I do not know whether they can take a suppletive copula form in the other TAM categories or if this is an absolute restriction. In Tuvuli this restriction covers a broad range of state expressions not just copulas and positionals, thus suggesting that this restriction may be common behaviour for stative verbs in these languages. Interestingly, in Lakhota, a Siouan language of the Great Plains in the US, verbs occurring in state expressions take a different set of subject agreement markers than verbs in non-state expressions (Bach, 2005). Thus the properties of the Avatime copulas and positionals are found cross-linguistically in other state classes suggesting that this behaviour may generally co-occur with statehood. At present there is not enough data to make any claims either way but this would be a very interesting area for future research. In conclusion, there are some very interesting and remarkable similarities between the Avatime and Tuvuli situational aspect systems. The lack of a strong telicity distinction is again noted, and the similarity of the grammatical properties of the state classes is intriguing. If the distinction between activities and accomplishments is not counted then the only difference lies in the number of classes distinguished, Tuvuli does not have a separate Uni-directional class, however as mentioned in the comparison to Ewe all of these descriptions are at an early stage and so the number of classes is still open to revision.

Thus we can see that, though there is very limited information, there is a real similarity in the types of situational aspect distinctions made in Kwa languages and that these differ from distinctions familiar from Indo-European languages in similar ways. This initial evidence is in agreement with Ebert and Zúñiga (2001) who claim that situational aspect systems are similar within language families but quite different across them. Though, the comparison between the Avatime and Vendler classification also shows that there is some similarity in situational aspect systems across language families as well. The range of variation in situational aspect systems cross-linguistically is still very poorly understood though hopefully it will be increasingly investigated in future.

3.8 Conclusion

In this chapter, I have identified four situational aspect classes in Avatime. The Action class contains situations involving durative, reversible change, either terminative or not. The sentences in this class are grammatically distinguished by a default past interpretation in the aorist and an in progress interpretation in the progressive. The Punctual class contains situations involving non-durative change. It is grammatically distinguished by an iterative interpretation in the progressive and an inability to co-occur with adverbs of duration or speed. The Uni-directional class contains situations involving non-reversible durative change. The sentences in this class are distinguished by a present end-state interpretation in the aorist and an inability to occur with the adverb *taba* 'twice'. The State class contains situations which involve no change at all. It is grammatically distinguished by a present interpretation in the aorist and a persistent present interpretation in the progressive. I found no evidence for a situational aspect distinction based on telicity. Of course these results reflect the behaviour of

the Avatime sentences that I tested in the tests that I used and it is quite possible that further classes will be found when further testing is done.

This system is interesting typologically primarily for its lack of a telicity distinction. This lack is made even more interesting when it is seen that it is likely a property of Kwa languages in general. Further investigation of the situational aspect systems of Kwa languages is needed to determine whether this is indeed a general property. Also further investigation of the typological variation in situational aspect systems in general is needed to determine whether or not this is a rare phenomenon.

One final comment before moving on to viewpoint aspect: Avatime is a verb serialising language, however I have only considered single verb clauses in this investigation. How serial verb constructions behave in terms of situational aspect is therefore an open question. One would imagine that the situational aspect class of a serial verb construction would be based on the situational aspect information contained within the elements that constitute it, however to test this we would need a much greater understanding of the situational aspect information of individual lexemes in Avatime and how these combine to create the situational aspect properties of the sentences described here.

Chapter 4 Viewpoint Aspect

4.1 Introduction

As explained in Section 3.1, I distinguish two types of aspect: situational and viewpoint aspect. Chapter 3 described situational aspect in Avatime. This chapter concerns distinctions of viewpoint aspect. In particular I shall focus on the grammatical morphological marking of viewpoint aspect distinctions, which, for simplicity, I will refer to as ‘aspects’. I will not consider here any periphrastic constructions which may convey viewpoint aspect information such as constructions with phasal verbs such as *kpēsē* ‘begin’.

There are three basic morphological aspects in Avatime: aorist, progressive and habitual. There are also two pre-verbal markers with an aspectual function, which grammatically behave quite differently from the other morphological markers of aspect: *zě-* ‘recurrent’ and *hà-* ‘prospective’. The rest of this chapter is primarily devoted to a description of these aspects: Section 4.2 describes the aorist, Section 4.3 describes the progressive, Section 4.4 describes the habitual, Section 4.5 describes the recurrent and Section 4.6 describes the prospective. Section 4.7 contains a comparison of the Avatime viewpoint aspectual system to those of nearby and related languages. I then conclude with a summary of the viewpoint aspect system of Avatime and some remaining questions in Section 4.8.

4.2 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. The verb is otherwise unmarked. This unmarked form of the verb was previously described by Ford (1971a) as a past tense form, however as I shall show below, its usages are not adequately explained by this categorisation and it is better analysed as an aorist aspect.

The aorist is by far the most common aspect in my corpus, occurring in 70% of clauses. It is used to refer to completed actions (examples 1 and 2), states (examples 3 and 4) and abstract situations such as in procedural descriptions (examples 5 and 6). As mentioned in Chapter 3 it also has a default deictic temporal reference which depends on the situational aspectual properties of the clause. Actions and Punctual events are generally interpreted as occurring prior to the time of speech, as can be seen in examples 1 and 2. Uni-directional changes and States, on the other hand, are generally interpreted as states holding at the time of speech, as can be seen in examples 3 and 4. It is presumably the default interpretation of Actions and Punctuals which led Ford to call this form a past tense (Ford, 1971a). However, the fact that the deictic reference varies according to the situational aspect class of the clause makes this a cumbersome analysis and points towards a simpler analysis based on aspect. In fact, this distribution of uses combined with the unmarked form of the verb is now considered the prototypical characteristic of the regionally ubiquitous aorist aspect, referred to by Welmers (1973) as the factative, which is essentially an unmarked perfective. The prototypical semantics of the perfective, denoting situations as “an unanalysed whole, with a well-defined result or end-state” (Dahl, 1985:78), automatically accounts for this form’s general use to refer to completed actions, states and abstract situations all of which are situations considered as a whole with the differences between them relating to differences in situational aspect and context. Thus a perfective semantics must be the default assumption for this form. The only potential problems with this analysis are how strong the default deictic temporal

interpretations are and whether or not the inferred deictic temporal information can be accounted for by this perfective semantics.

1. *me-dzi* *trɛ* *me* *ke-pe-a* *mɛ*
 1S-return go 1S C6S-house-DEF in
 ‘I’ve gone back to my house.’
 (Lego_AB&WO_2)

2. *lě* *mà-tǎ* *dɔmɛ*
 then 1S-cook something
 ‘Then I cooked something.’
 (Interview_K&A)

3. *ò-gbé* *lɔ-yà* *ē-dzè*
 C2S-rope C2S-this C2S-be.long
 ‘This rope is long.’
 (S10271_SO)

4. *lì-gba-tɔ* *lì-lì* *lɔ*
 C3S-building-some C3S-be.at there
 ‘There is a house there.’
 (Dir-house_ED)

5. *xɛ* *ma-kpɛ* *kì-fù-yɛ-ɛ* *kɔ* *me-dzi* *mɔmɔnyɛ*
 when 1S-put C4S-fire-DEF-CM then 1S-buy k.o.fish
kɔ *ma-kpɛ* *tomatosi-e* *ni* *a-kpa-la*
 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.’
 (Okra_AB)

6. *kɔ* *mɛ-trɛ* *ke-pe-a* *mɛ-ɛ*
 then 2P-go C6S-house-DEF in-CM
 ‘Then you go home.’
 (part of the description of how puberty rites were performed in the past)
 (Ablabe_PA)

A quick look through the corpus shows that these default past and present interpretations can easily be overridden. There are several examples where an Action or Punctual sentence in the aorist is interpreted as occurring in the speaker’s future (examples 7 and 8), though these are not very common. Interestingly, there are no examples where this combination is interpreted as referring to a present situation. There are also many examples where a Uni-directional change or State sentence in the aorist is interpreted as occurring in the speaker’s past (examples 9 and 10). There are no examples with a future interpretation, though. The commonality and range of examples of these non-default interpretations means that if we assumed that this form contained a specification for past or present tense we would have a very difficult task explaining all the cases where this specification is flouted. While relative tense effects could be used to explain a few examples, there are many cases where this explanation does not work and we still have the problem of the past interpretation of Actions and Punctuals and the present interpretation of Uni-directionals and States. Thus it is

preferable to analyse this form without an inherent deictic temporal specification, and so as an aspect.

7. *o-lago-lo* *ε-dɔ* *gi* *kɪ-tɔ* *bɪ-dɔmɛ* *pɔ* *te*
 C2S-evening-DEF C2S-land COMP 1P-cook C4P-thing finish like.this
ma-kɔ *ke-plikpa* *kɔ* *ma-kpasi*
 1S-take C6S-book CONJ 1S-learn
 ‘In the evening, when we finish cooking, I will take my book and learn.’
 (describing what he will do tonight after school)

(Interview_KA&RE)

8. *ègé* *wō-bū* *sì* *wō-fō-e* *áà-bìtē* *gì*
 what 2S-think COMP 2S-brother-DEF C1S:POT-do COMP
wó-dzì *yē* *klò*
 2S:NEG-return C1S place
 ‘What do you think your bother will do if you don’t visit him?’

ā-ɲwɫimì *létà* *tsísì* *mè*
 C1S-write letter send 1S
 ‘He will write me a letter.’

(Dahl_15_SO)

9. *ɔ-fɪnī* *ní* *bi-dɔmɛ* *aba-ε*
 C1S-lie LOC C4P-thing on-CM
 ‘She was lying on the thing.’

(Tempest_SO)

10. *le* *be-ze* *lɔ-ε*
 and C1P-be there-CM
 ‘And they dwelt there.’

(History_WO)

Now it is only necessary to account for how the deictic temporal interpretations can be derived from the aspectual semantics and the context. The traditional view of the aorist or factative is that it indicates the most obvious fact of the sentence, so if the sentence is stative then it will be interpreted as present and if it is non-stative it will be interpreted as past (Déchaine, 1991 & 1992; Welmers, 1973). I don’t believe that this explanation is necessary, however, as the behaviour of this unmarked verb form can be equally well accounted for with a perfective semantics, and this is presumably why the term aorist is now commonly used.

A perfective semantics easily explains the default past interpretation of Actions and Punctuals, because whole and thus completed situations are typically situated in the past¹. Smith (2008) explains this default interpretation particularly well. According to her account the perfective indicates that a situation is bounded and bounded situations by definition cannot be situated in the present. Thus a perfective situation must be interpreted as occurring in either the past or the future, and it will by default be interpreted as occurring in the past as the future is inherently more marked than the past due to its additional modal aspect. This

¹ This connection between perfective aspect and past interpretation is, in fact, a very common one and has been commented on by many researchers (Binnick, 1991; Dahl, 1985; Klein, 1994).

default past interpretation is strengthened in Avatime by the existence of a potential mood form which would normally be used when referring to future situations. A perfective semantics also predicts a default past interpretation for Uni-directional changes, and indeed, as noted in Chapter 3, this is exactly what happens and it is only because the change is irreversible that we are left with a present end-state interpretation. 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. If we accept Guéron's (2008) claim that because States have no boundaries they cannot be perfective this is very easy because even if a State is morphologically marked as perfective it remains imperfective and imperfective situations are by default interpreted as being present. If we instead take the traditional definition of the perfective aspect as a form which "indicates the view of a situation as a single whole" (Comrie, 1976:16) then as States have no internal temporal distinctions this could be interpreted as referring simply to the state in general. In this case it seems that the temporal reference of the situation would simply be the same as that of the topic time and so in the default case States would be interpreted as present. While both of these accounts amount to the same thing I find each of them slightly dissatisfying. Guéron's claim that non-bounded situations can never be perfective seems slightly stipulative and the Comrie based explanation seems slightly fuzzy. Thus while either of these explanations would be sufficient this is one of the cases where I find using Klein's terminology particularly helpful. Klein (1994) captures the idea that the perfective refers to whole events by defining it as a form which 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, note that this is equivalent to the fuzzy 'perfective of a state simply refers to the state' idea above. Then, because in the default case the topic time is the speaker's present time, this gives the desired default interpretation with the situation overlapping with the speaker's present.

The default deictic temporal interpretations for all situational aspect classes, therefore, follow directly from a perfective semantics. Also, according to this analysis a change in the topic time would result in a change of the deictic temporal interpretation, and this is exactly what we find (examples 7-10). This analysis also explains why it is possible to shift the interpretation of aorist States into the past but not the interpretation of aorist Actions, Punctuals and Uni-directionals to the present. A whole Action, Punctual or Uni-directional situation includes the boundary points and these boundary points prohibit a present interpretation as the present is itself punctual. States however are more naturally interpreted as present but there is nothing preventing a past interpretation if the context is suitable. The only property that is not accounted for by this analysis is the relative lack of future interpretations. This is easily explained, however, by the fact that there is a competing form, the potential mood, and that by their very nature future situations are unknown and so highly likely to be referred to using the potential marker. Hence, I have shown that this form's range of uses and interpretations are most easily explained by analysing it as a perfective aspect, which I refer to as an aorist following the regional tradition.

4.3 Progressive

The progressive is marked by the prefix *ǝ* and takes subject agreement markers from Set 1. The vowel of the subject agreement marker and the progressive assimilate: if the vowel in the subject agreement marker is not high then it will become *ε*, if it is then the progressive vowel will assimilate to it. 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 (examples 11-13). It cannot be used for non-continuous actions and so is not used for actions which are repeated at separate times, in these cases another form must be used either the aorist, habitual or recurrent form depending on other aspects of the semantics (examples 14 and 15).

11. *ege Afwa èé-bítε* *abla*
 what Afwa C1S:PROG-do now
 ‘What is Afwa doing now?’

èé-wà ā-xwè-nā
 C1S:PROG-do C3P-work-DEF
 ‘She is working.’

(PAQ_01_MM)

12. *li-po-le kīle gi èé-ŋwłimj letε*
 C3S-time-DEF that COMP C1S:PROG-write letter
ye-nemi-ye e-tuku a-ba le a-fē ye sūε
 C1S-friend-DEF C1S-enter C1S-come CONJ C1S-lie.down C1S side
 ‘When she was writing the letter, her friend came in and lay beside her.’

(Tempest_WO_1)

13. *ba-tō bèé-wa a-xwε, ba-tō bèé-dzi sukūu*
 C1P-some C1P:PROG-do C3P-work C1P-some C1P:PROG-go school
 ‘Some are working and some are going to school.’ (talking about the occupations of her grandchildren)

(Interview_FO&MM)

14. *lī-xwè wōlī Kofi èé-zè-wa lī-pà-lē lī-vlē-lē*
 C3S-work which Kofi C1S:PROG-REC-do C3S-saturday-DEF C3S-morning-DEF
 ‘What work is Kofi doing every Saturday morning?’

ā-līlō kè-pē-à mē
 C1S-clean C6-house-DEF in
 ‘He cleans the house.’

(PAQ_02_MM)

15. *ɔ-nj-ε gi a-zε-da bī-dzyε-a*
 C1S-person-DEF COMP C1S-REC-sell C4P-meat-DEF
 ‘the person who sells the meat’

(Dog_PA)

In previous work on Avatime, Ford (1971a) described three progressive forms: past (*āzē*), present (*ē*) and future (*āzē*). I don’t believe that this is an accurate description. Firstly, the forms that Ford refers to as the past and future progressive are formally related, in my analysis they are the aorist and potential forms of the recurrent, respectively. Ford’s account does not make this relation clear. Furthermore, these forms are not limited to the past and future, respectively, and rather occur in all times in which the aorist and potential can occur. I shall discuss the recurrent in Section 4.4.5 and the potential in Section 5.2. Thus there is no reason to assume that these forms are part of a progressive paradigm. The only motivation for

doing so would be if the progressive form *ǔ-* was in fact limited to the present. While it is true that this form most often occurs in reference to present situations, this is by no means an absolute limitation. There are several examples in my corpus of the progressive being used to refer to past situations, and many of these cannot be accounted for by a relative tense type explanation (examples 16-17). There are no examples of the progressive used to refer to future situations, but, as with the aorist above, this lack is easily explained by the competing potential form. The distribution of past and present interpretations would be difficult to account for if the progressive contained a present tense specification. This distribution is easily explained, however, by assuming a progressive semantics without specific tense specification. The progressive aspect indicates that the situation is ongoing at the topic time and this gives us the default present interpretation as by default the topic time overlaps with the speaker's present. It also accounts for all the past examples, as in all cases the topic time is clearly prior to the speaker's present. Thus it is a much simpler and more effective analysis to treat this as a general progressive without a present tense specification.

16. *klatse* *èé-se* *nì* *ka-droi-a* *ka-tsyé* *ke-chase* *ye*
 deer C1S:PROG-run and C6S-dog-DEF C6S-also C6S-chase C1S
 'The deer was running and the dog also chased him.'

(Frog_K)

17. *small* *small houses* *bèé-ze-e*
 small small houses C1P:PROG-be-CM
 'There were very small houses'

(Said at the beginning of a description of what Vane was like in the past)

(Past_AB)

4.4 Habitual

The habitual is indicated using the prefix *zǔ-* 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 may be considered to be usual or predictable (examples 18-20) or to situations which are generic, or always true (examples 21-24). 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 (examples 18 and 19) and present (examples 20-24). Examples of future reference are again not found, though again this can be explained by the option of using the potential mood.

18. *xe* *bε-trε* *ku-do* *ɔ-ŋwa* *te*
 when C1P-go C5S-road-DEF C2S-weed like.this
bì-zε-pɔ̀ *bì-dɔ̀mε* *ŋa*
 C1P-HAB-roast? C4P-thing eat

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

(History_WO)

19. *ege* *wo-nemi-nyime* *ì-zε-bj̄tε* *xe* *a-ŋa* *l̄i-vlε*
 what 2S-friend-man C1S-HAB-do CONJ C1S-eat C3S-morning
bì-dɔ̀mε *pɔ̀* *ga* *li-go-le*
 C4P-thing finish move C3S-year-DEF

'What did your brother usually do after breakfast last year?'

i-zε-ηwlimi *ku-plikpa*
 C1S-HAB-write C6P-book
 ‘He wrote letters’

(Dahl_18_SO)

20. *li-xwε* *woli* *wo-fu-ε* *ižě-wà* *ní* *ofis-yε*
 C3S-work which 2S-brother-DEF C1S-HAB-do LOC office-DEF
 ‘What work does your brother do in the office?’

i-zε-ηwlimi *leta-a*
 C1S-HAB-write letter-DEF
 ‘He writes letters.’

(Dahl_25_SO)

21. *é-zě-bēmē* *míáò*
 C2P-HAB-cry meow
 ‘They (cats) say meow’

(Dahl_74_SO)

22. *kō* *níté* *kú-zě-wà* *ì-nyōnè* *yǎ*
 so how 1P-HAB-do C2P-farm-DEF here
 ‘So this is how we farm here.’

(Farming_SO)

23. *li-ze-do* *ya* *kɔ* *abla* *kile* *ku-dí* *ya-ε*
 C3S-HAB-exit here so now how 1P-sit here-CM
li-ze-do *ya* *te-e*
 C3S-HAB-exit here like.this-CM

‘It (the sun) rises here. Then as we are seated here, it rises from this place.’

(Interview_SM&MM)

24. *kítε* *bí-zε-xwa* *ba-a*
 how C1P-HAB-call C1P-CM
 ‘How are they (your children) called?’

(Interview_GE&MM)

The habitual is distinguished from the progressive because it refers to repeated instances of situations, while the progressive refers to single situations. Note that if there is something else in the clause which provides the repeated action meaning either the habitual or the progressive can be used with only a slight difference in meaning (examples 25 and 26).

25. *li-we* *kakaa* *èé-dzē* *ba-nɔ-a* *e-nyi-na*
 C3S-day every C1S:PROG-forget C1P-people-DEF C3P-name-DEF
 ‘He is always forgetting people’s names.’

(PAQ_52_MM)

26. *li-we kaka mī-zě-yō ð-līzāt ð-nō*
 C3S-day every 1S-HAB-rise C2S-dawn-DEF
 ‘I always get up at dawn.’

(Dahl_71_SO)

4.5 Recurrent

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

It seems quite likely that this form originated from a serial verb construction, probably with the verb *zē* ‘be’. Now, however, it is clearly a verbal prefix because it participates in vowel harmony triggered by the verb root. Avatime speakers above the age of 50 often use *zō-* in place of *zě-* for the recurrent², though *zě-* is always also acceptable. This alternation is likely a remnant of the vowel prefixed to the second verb in the serial verb construction. Avatime speakers under the age of 20 exhibit a different alternation: for them *lī-* is interchangeable with *zě-* in all cases of the recurrent. This may indicate a re-analysis of this form as the *lī* ‘be.at’ verb. Neither of these alternations is possible with the habitual *zě-*.

The recurrent marker, unlike the aspectual markers discussed above, can and indeed must co-occur with other aspect and mood markers. Most frequently, it occurs with the aorist or the potential (examples 27-30). There are also some examples of it occurring with the progressive (example 31), subjunctive (examples 32 and 33), intentive (examples 33 and 34) and imperative (examples 35 and 36). Thus, it can occur with all moods and there are only two aspectual markers for which I have no examples of it occurring with, the habitual and the prospective. There are two possible explanations for the lack of co-occurrence with the prospective. Firstly, the prospective is quite rare in my sample, occurring in only seven clauses, so it is not very surprising that there are no examples with the recurrent. Secondly, it is possible that they occupy the same slot within the verb complex. The prospective, like the recurrent, follows most aspectual and mood markers. It is not clear, however, whether or not it follows the intentive mood marker, or whether it precedes or follows the directional markers. So this combination might be ruled out by the grammatical formation of the verb, or it may simply not occur in my sample. There is no grammatical reason why the habitual should not occur with the recurrent, unless their most likely common origin prevents them from co-occurring. This combination does not seem to be pragmatically likely, though, given the similarity in meaning between the two forms. Thus, while it may be highly unusual, I believe there would be no grammatical restriction against the habitual occurring with the recurrent. One would only need to find a situation where a speaker wished to express the habitual occurrence of extended actions. Hence, I believe that the recurrent can occur with all aspects and moods, with the possible exceptions of the prospective and habitual.

² Ford (1971a) found that the *zō-* was used exclusively with the future (or potential) form of the continuative. However, in my corpus, while *zō-* does indeed occur frequently in the potential, it is not limited to it and is also especially common in the 2nd person singular.

27. *ɔ-ni-ε gi a-zε-da bi-dzyε-a*
 C1S-person-DEF COMP C1S-REC-sell C4P-meat-DEF
 ‘the person who sells the meat’
 (Dog_PA)
28. *ma-zε-wa a-xwε-na ní cocoa marketing board ní Koforidua-ε*
 1S-REC-do C3P-work-DEF LOC cocoa marketing board LOC Koforidua-CM
 ‘I was working at the cocoa marketing board in Koforidua.’
 (Life_AB)
29. *tɔ kɪâ-zě-bā kè-pē-à*
 ATT 1P:POT-REC-come C6S-house-DEF
 ‘We shall be coming home (often).’
 (Interview_KA&RE)
30. *ege wo-bu si wo-nimi-ye áâ-zɔ-bjɛ xe ki-kū klo*
 what 2S-think COMP 2S-friend-DEF C1S:POT-REC-do when 1P-arrive there
 ‘What do you think your friend will be doing when we arrive?’

áâ-zɔ-ɲwlimi ke-plikpa
 C1S:POT-REC-write C6S-book
 ‘He will be writing a letter.’
 (Dahl_17_AB)
31. *lī-xwè wōlī Kofi èé-zě-wa lī-pà-lē lī-vlē-lè*
 C3S-work what Kofi C1S:PROG-REC³-do C3S-Saturday-DEF C3S-morning-DEF
 ‘What work does Kofi do every Saturday morning?’
 (PAQ_02_MM)
32. *Kwami ye i-nu si o-ze-ki ba-ga bi-tɔ*
 Kwami C1S C1S-be COMP C1S.SBJV-REC-give C1P-animal C4P-some
ga ɲa-ε
 animal eat-CM
 ‘Kwami must be feeding the animals.’
 (PAQ_79_MM)
33. *xe gi wɔ-wɔ wɔ ke-de-a tsye mɪ-ta-zε-tɔ dɔmε*
 CONJ COMP 2S-? 2S C6S-back-DEF also 1S.SBJV-INT-REC-cook thing
 ‘When you come back I’ll still be cooking.’
 (PAQ_83_MM)
34. *wɔ-ka a-ta-zε-dzɔ kɪ-bɔ-ε kpe ki wɔ*
 2S-father C1S-INT-REC-collect C4S-money-DEF put give 2S
 ‘Your father will be contributing money for you.’
 (Conv_SO,ErA,VA&AA)

³ Note that this could also be the itive directional marker zě-, however there was no movement involved in this particular context and so I believe it is more likely to be the recurrent.

35. *zě-bí mé dzédzé là*
 REC-ask 1S another C3S
 ‘Ask me another thing’

(Interview_KA&MO)

36. *zε-ga*
 REC-move
 ‘be going’

(Lego_KA&RE)

The recurrent is used to refer to situations which are ongoing or repeated over a certain interval of time. Thus it overlaps 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 (contrast example 26, repeated here as 37, with 38 and example 19, repeated here as 39 with 40).

37. *li-we kaka mī-zě-yō ð-līzātð-nō*
 C3S-day every 1S-HAB-rise C2S-dawn-DEF
 ‘I always get up at dawn.’

(Dahl_71_SO)

38. *ð-glē lo-ya gi kpēsē mó-zě-yō ð-līzātð-nō*
 C2S-week C2S-this COMP start 1S:NEG-REC-rise C2S-dawn-DEF
 ‘I won’t rise at dawn this week.’

(Dahl_72(negated)_SO)

39. *ege wo-nemi-nyime ð-zε-bīte xe a-ŋa ð-vlē*
 what 2S-friend-man C1S-HAB-do CONJ C1S-eat C3S-morning
bī-dōme pɔ ga li-go-le
 C4P-thing finish move C3S-year-DEF
 ‘What did your brother usually do after breakfast last year?’

ð-zε-ŋwlimi ku-plikpa
 C1S-HAB-write C6P-book
 ‘He wrote letters.’

(Dahl_20_AB)

40. *a-zε-read law ní Legon University of Ghana*
 C1S-REC-study law LOC Legon University of Ghana
 ‘He was studying law at the University of Ghana, Legon.’

(Life_AB)

There are two principle factors which determine the speaker’s choice of the progressive or the recurrent. The first is that the recurrent has a slightly wider semantic range than the progressive, as it can be used to refer to sequences of repeated events without presenting them as a whole (example 38). So if someone wishes to refer to a sequence of repeated events which is not habitual he or she will use the recurrent, as Mathias did in example 41. The second factor is that the recurrent can and indeed must occur with another aspect or mood marker. This, on one hand, gives it a greater range in that it can be used to give additional

information while still conveying the ongoingness of the situation. For instance, by using the aorist a speaker can convey both that the situation was ongoing and that it completed⁴ (examples 42 and 43), or by using the potential they can indicate that it is a potentially occurring ongoing situation (example 30, repeated here as 44). On the other hand, however, it reduces the applicability of the recurrent, because, if the speaker wishes to convey the situation as ongoing only, without any of these additional meanings, then he or she is pragmatically obliged to use the progressive rather than the recurrent.

41. *li-go le-lo gi li-za-e Kofi a-ze-pani blo*
 C3S-year C3S-that COMP C3S-pass-CM Kofi C1S-REC-speak 1P
e-we ta-ta
 C3P-day C3P-three
 ‘Last year Kofi visited us three times.’

(PAQ_05_MM)

42. *ma-ze-ŋa i-klipo-le-e*
 1S-REC-eat C2P-witness-DEF-CM
 ‘I functioned as a witness then.’

(Ablabe_PA)

43. *ba petee o-nugu to-le be-ze-pani*
 C1P all C2S-mouth C2S-one C1P-REC-talk-COM
 ‘They all spoke with one voice’ (that was the way things used to be, but not any longer)

(Interview_GE&MM)

44. *ege wo-bu si wo-nimi-ye áà-zò-bjete xe ki-kū klo*
 what 2S-think COMP 2S-friend-DEF C1S:POT-REC-do when 1P-arrive there
 ‘What do you think your brother will be doing when we arrive?’

- áà-zò-ŋwljimi ke-plikpa*
 C1S:POT-REC-write C6S-book
 ‘He will be writing a letter.’

(Dahl_17_AB)

If the recurrent occurs in the subjunctive mood it can be homophonous with the habitual. This depends on the particular verb, as some verbs take Set 2 subject agreement markers in the subjunctive and others take Set 3, and only the former would lead to this homophony⁵. Given this fact, the general similarity in form and the not too great difference in semantics between the habitual and the recurrent, it may be thought desirable to link the two in some way. The

⁴ One may ask what the distinction is between the aorist-continuative and a past progressive. It is quite true that this combination of ongoingness and completion implies that the whole event occurred prior to the topic time and as discussed in Section 3.1 this in turn has a default interpretation of occurring in the speaker’s past. However, according to this analysis it should be possible to shift this temporal reference by shifting the topic time, unfortunately this is not something I tested. There is another distinction between the two though and that is that a past-progressive should not require the situation to have completed but the aorist-continuative should. I did test this interpretation on Avatime speakers and indeed if the aorist-continuative is used then the situation must be completed.

⁵ Though, of course, with some subjects many aspect and mood categories become homophonous due to the lack of a distinction between the sets and the way the vowels coalesce. For instance, singular subjects from Class 3 create an impressive degree of homophony across the aspects and moods.

difference in usage (contrast 32 and 34 with 18-26) and grammatical properties (the habitual cannot occur with other aspect and mood markers and always takes Set 2 subject agreement), however, seem more than adequate to show that there is no direct synchronic link between the two constructions. The habitual certainly cannot be equated with the subjunctive-recurrent which would be the most obvious choice. It does seem likely, though, that both the habitual and the recurrent are derived from the same verb, *zè* ‘be’, and that they have followed different routes to grammaticalisation and we thus end up with these two fairly similar distinct but complementary forms.

4.6 Prospective

The prospective is marked by *hà-*, and likely comes from the verb *hà* ‘near’. Like the recurrent it can and must occur with another aspect or mood marker. It indicates that the situation is on the verge of occurring. As mentioned above in Section 4.5, there are only seven examples of this form in my corpus, so it is fairly rare. Possibly due to this rarity, I only have examples of it occurring with the progressive (examples 45 and 46) and the subjunctive (example 47). It is possible that with a larger corpus more examples would be found with other aspect and mood markers, unfortunately from this small sample it is difficult to predict whether or not this is likely.

45. *èé-ha-kpa* *ní* *class*
 C1S:PROG-PROSP-finish LOC class
 ‘He is finishing a class.’

(PAQ_26_MM)

46. *èé-ha-ηwlimi* *pɔ*
 C1S:PROG-PROSP-write finish
 ‘She is almost finished writing.’

(Tempest_WO_1)

47. *ì-ha-ηwlimì* *pɔ* *lɛ* *ye-nemi-ye* *a-ba-za-ε*
 C1S.SBJV-PROSP-write finish then C1S-friend-DEF C1S-VENT-pass-CM
 ‘When she was nearly finished writing, her friend came and passed.’

(Tempest_WO_1)

4.7 Typological situation

4.7.1 Comparison to other GTM languages

At present not many of the TAM systems of the other GTM languages have been described, though there are several projects currently underway which should remedy this in the next few years. In this section, I will compare the Avatime aspectual system to that of Tuwuli and Logba. These make an interesting comparison as Tuwuli is more closely related to Avatime but spoken more distantly, and Logba which is less closely related is spoken in a region adjacent to that of Avatime. Avatime’s closest relatives, Nyangbo and Tafi, which are also spoken in regions adjacent to Avatime, are currently under description and it will be interesting to see how their aspectual systems compare to Avatime’s when these descriptions are complete.

On the whole the aspectual systems of these three languages, Tuwuli, Logba and Avatime, appear to be fairly similar. The unmarked form behaves in the characteristic aorist manner in each language. This is hardly limited to this language family though and is incredibly common throughout the wider region. Avatime is the only language with a reported prospective marker. As far as the rest of the aspectual system is concerned, all three of these languages have some type of progressive, habitual and recurrent forms, though their behaviour varies in each language. Though, due to the differences in style and detail of description, it is often difficult to determine the degree of similarity or difference in these forms' behaviour. I shall compare these three forms for each language separately below.

Tuwuli has an imperfective marker *ka-*, a present-imperfective *a-* and a periphrastic present-progressive construction *la-mla ... la-* (Harley, 2008). It is clear from Harley's description that the imperfective *ka-* can be used to refer to non-present situations and seems to behave very similarly to the Avatime recurrent marker, both in its semantics and in its ability to combine with other TAM markers. The present-imperfective *a-* is generally used for present situations, but can also be used to refer to past situations in order to create a present feeling, like the English historic present. This form seems to correspond to the Avatime progressive, though it appears to have a stronger restriction to the present. Another difference between the Tuwuli present-imperfective and the Avatime progressive is that the former is also used to refer to habitual situations whereas Avatime has a separate habitual marker. The periphrastic present-progressive construction in Tuwuli is distinguished from the present-imperfective in that it is used to refer to events which are spread out over an extended period of time and it does not require that the event be actively occurring during the topic time. Avatime has no distinct form corresponding to this usage, instead it uses the general progressive marker to refer to these situations. Therefore, the Tuwuli distinction between the imperfective *ka-* and the present-imperfective *a-*, is quite similar to the Avatime distinction between the recurrent and the progressive. The semantics of the present-imperfective and the progressive are quite different, however, and Avatime lacks a form corresponding to the Tuwuli periphrastic present-progressive construction.

The Logba aspectual system is the closest of these three to Avatime. Logba has a present progressive marker *lú-*, a past progressive marker *tú-* and a habitual marker *tù-* (Dorvlo, 2008). Like in Avatime, the past progressive marker can be modified by the future marker⁶ and then refers to ongoing situations in the future. This makes me question whether this form is really a *past* progressive or whether it would be better analysed with a less restrictive temporal specification. It is interesting to note that in both Logba and Avatime the habitual and the past progressive or recurrent forms are very similar, though they are quite different across the languages. The close link between the habitual and the progressive has often been commented on (Bybee, Perkins & Pagliuca, 1994; Comrie, 1976; Dahl, 1985) and it is cross-linguistically common for a habitual marker to develop from a progressive (Bynee et al, 1994). It seems likely then, that the habitual and the past progressive or recurrent forms developed from a common source in both these languages, though the source seems to differ between the languages. The main difference between the Logba and Avatime systems is the difference in behaviour between the Logba present progressive, which is fairly strictly limited to present situations and can be used to refer to imminent actions, and the Avatime progressive, which is not restricted to the present and cannot be used to refer to imminent actions.

⁶ In Avatime this is better analysed as a potential mood.

4.7.2 Comparison to Ewe

Ewe is related to Avatime, but more distantly than the above GTM languages. It deserves special mention here because the Avatime people live adjacently to Ewe speakers and are all bilingual in Ewe. Also some parts of the language appear to have been shifting towards Ewe over the last few generations. There is no real evidence that this shift has affected the aspectual system though.

Ewe has three verbal aspectual markers: a preverbal repetitive marker *ga-*, a habitual suffix *-(n)a* and the unmarked verb form which indicates the aorist (Ameka, 2008). The progressive and prospective aspects are indicated using periphrastic constructions (Ameka, 1991). This list of categories is quite similar to those of Avatime and the other GTM languages. The method of marking is quite different, however, with Ewe using a combination of prefixes, suffixes and periphrastic constructions and the GTM languages tending more to the sole use of prefixes. Thus, given the general similarity of all the systems considered here it does not seem likely that the similarity to Ewe is due to recent language shift. It is much more likely that these are simply common categories that are shared by many of the languages in the Kwa family, and or the region.

It is also questionable how similar the semantics of the similarly named categories really is. Indeed, a comparison of the Dahl questionnaire data for Avatime and Ewe shows that there are many differences in the use of these categories. Avatime speakers often used the habitual for situations which were translated into Ewe with an aorist. Sentences which were translated into Ewe using the habitual, on the other hand, were translated into Avatime using a variety of the habitual, progressive, recurrent and in one case even the potential. This very brief comparison shows that while these categories may have similar roles within the language's aspectual system, there is still quite some difference in their semantics. I have no such data from the other GTM languages but no doubt the aspectual categories are also used rather differently there as well.

4.8 Conclusion

There are five morphological aspectual categories in Avatime: the aorist, which is unmarked; the progressive *ě-*; the habitual, which is marked by a combination of Set 3 subject agreement markers and *zě-*; the recurrent *zě-*; and the prospective *hà-*. The first three of these are basic in that they can occur on their own, and the last two must be combined with another aspect or mood marker. There is no evidence that any of these contain any specification for tense.

There is some similarity between the Avatime aspectual system and those of the other GTM languages, particularly with the neighbouring Logba. There is also some similarity between the aspectual system of Avatime and that of Ewe, though to a much lesser extent. There are, of course, many differences between the Avatime aspectual system and that of each of these languages. Though, I doubt you could find any two languages with identical aspectual systems anywhere in the world.

As after any study, there are many questions remaining. The most obvious of these relates to the combinational properties of the recurrent and prospective. Is it possible to combine the habitual and the recurrent and if not why not? Do the recurrent and the prospective occupy the same slot in the verbal complex, and if not where is the prospective situated? It would also be interesting to investigate the boundaries of the usages of these forms in more detail. One

major question of aspect that I have not touched on at all here is that of phase aspect, things like *starting* and *finishing*. This is quite an interesting area in Avatime. Starting and finishing an event are indicated by the verb *kpese* 'start' and the clause final particle *pɔ* 'finish', respectively. First of all it is interesting that these two different strategies are used and it would be interesting to see how other kinds of phase aspect are indicated. Secondly, when *kpese* 'start' is used there are two options for how the verb referring to the main event is treated. In some cases it is nominalised and in others it follows *kpese* 'start' in a serial verb construction. It would thus be very interesting to investigate the differences between these two strategies and whether or not other verbs have a similar alternation.

Chapter 5 Mood and Modality

5.1 Introduction

Tense and particularly aspect are notorious for being vaguely defined concepts, with different researchers often using widely divergent approaches and thus coming up with widely divergent and contradictory theories. The category of mood and modality, however, is even less well defined. In fact, Bybee et al (1994:176) say that “it may be impossible to come up with a succinct characterisation of the notional domain of modality”. Nuyts (2005) claims that modality may not even exist as a single category in the way of tense and aspect and simply defines the domain of modality as the section of the wider tense, aspect and mood domain which remains once tense and aspect have been removed. Despite all the problems involved with defining the notional category of mood and modality it seems to be possible to give some indication of the kind of things which are contained within it, the most typical being the speaker’s view of the likelihood that the event described will or has occurred. I will not attempt to give a definition of mood and modality here and will instead rely on Palmer’s (2001:1) characterisation of modal notions as those which are “concerned with the status of the proposition that describes the event”.

Researchers also differ in the stance they take on the difference between mood and modality. The most common view is that mood is the obligatory grammatical marking of modal notions, while modality refers to the optional non-grammatical marking of the same set of modal notions (de Haan, 2005). However, many researchers (for instance Bybee et al, 1994 and Palmer, 2001) believe that in addition to this difference in encoding there is a real semantic difference between mood and modality. In this thesis I will take the most general approach and assume that the difference between mood and modality is one of encoding alone.

The mood inventory of Avatime consists of a potential, discussed in Section 5.2, a subjunctive, discussed in Section 5.3, and an imperative, discussed in Section 5.4. There is also a particle *tɔ*, which is very commonly used with the imperative and the subjunctive, which I will discuss in Section 5.5. Section 5.6 contains a discussion of the intensitive modal marker, *tá*-. I discuss negation in Section 5.7. In Section 5.8 I give a brief summary of the mood and modality system. Section 5.9 then compares the Avatime mood and modality system to the systems of nearby and related languages. Finally I give a brief conclusion in Section 5.10.

5.2 Potential

The potential is indicated by the prefix *â*-. Because the vowel in the subject agreement marker assimilates, it is not possible to tell whether it takes subject agreement markers from Set 1 or 2 and in either case there are four exceptions (see Table 1). The vowel in the subject agreement marker assimilates to /a/ unless it is high in which case you are left with the /ja/ or /ɣa/ combination. In all cases the contour tone is spread across both vowels, so the first vowel is high and the second is low. If the subject agreement markers come from Set 1 then the exceptions are: the Class 5 singular and plural where agreement prefixes come from Set 3, and the Class 6 singular, where there is no assimilation, and plural where the agreement prefix comes from Set 2. If the subject agreement markers come from Set 2 then the exceptions are: the Class 5 singular and plural again with agreement from Set 3, the Class 6 singular where agreement comes from Set 1 and doesn’t assimilate, and the 1st person plural where agreement comes from Set 1 or 3. Given these lists of exceptions, there is very little

motivation for choosing either set over the other, though one could say that the list of exceptions is slightly simpler when we take Set 1 as the base. I will thus leave it open whether this form takes subject agreement prefixes from Set 1 or 2 or some unique other set.

Table 1: Form of the \hat{a} -potential when combined with subject agreement.

Noun Class	Set 1	Set 2	Set 3	Subject Agreement + Potential
1 st person sg	me-	mO-	mI-	máà-
2 nd person sg	wO-	wO-	wU-	wáà-
Class 1 sg	e-	O-	I-	áà-
Class 2 sg	è-	O-	I-	áà-
Class 3 sg	II-	II-	II-	líà-
Class 4 sg	kI-	kI-	kI-	kíà-
Class 5 sg	kε-	kU-	kI-	kíà-
Class 6 sg	kε-	ka-	kI-	kéà-
1 st person pl	kI-	kU-	kI-	kíà-
2 nd person pl	mle-	mIa-	mII-	mláà-
Class 1 pl	bε-	ba-	bI-	báà-
Class 2 pl	Ì-	I-	I-	íà-
Class 3 pl	ε-	a-	I-	áà-
Class 4 pl	bI-	bI-	bI-	bíà-
Class 5 pl	bε-	ba-	bI-	bíà-
Class 6 pl	kI-	kU-	kI-	kúà-
Class 7	sI-	sI-	sI-	síà-

This form is commonly used to refer to future situations and was previously described by Ford (1971a) and Funke (1909) as a future tense, at least for the Amedzofe dialect. I will argue here, however, that it is better analysed as a potential mood, at least for the Vane dialect.

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 and also for languages to use a potential marker to refer to future situations. It can, thus, 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, however, this distinction can be drawn based on the particular distribution of uses and one analysis will clearly 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 1 and 2, there are also some cases where this marker is not used and the reference is clearly to a future situation, such as examples 3 and 4. Hence, future time reference is not a sufficient motivation for the use of this marker. It is also far from a necessary condition as almost half (42%) of the examples of this form in my corpus refer to non-future situations, for instance examples 5-8. Importantly, all of these examples have in common the fact that they refer to potential situations whether future or non-future. However, while the number of non-future examples suggests that future time reference may not be a part of the semantics of this

form all these examples could be explained by analysing it as a future tense which is extended to cover potential situations as well.

1. *kɔ xe gi wo-do suku-ε ege wáà-bítε*
 so if COMP 2S-finish school-DEF what 2S:POT-do
 ‘So if you finish school what will you do?’
 (Interview_KA&RE)

2. *yáà-do anukware*
 C1S.LOG:POT-speak truth
 ‘He will tell the truth.’ (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.)
 (Duck_SO)

3. *o-lago-lo ε-do gi kị-tɔ bị-dɔmε pɔ te*
 C2S-evening-DEF C2S-land COMP 1P-cook C4P-thing finish like.this
ma-kɔ ke-plikpa kɔ ma-kpasi
 1S-take C6S-book and 1S-learn
 ‘In the evening, when we finish cooking, I will take my book and learn.’
 (describing what he will do tonight after school)
 (Interview_KA&RE)

4. *ègé wō-bū sị wō-fōe áà-bítē gị wó-dzì*
 what 2S-think COMP 2S-brother C1S:POT-do COMP 2S:NEG-go
yē klò
 C1S place
 ‘What do you think your bother will do if you don’t visit him?’

ā-ɲwɫimị létà tsísì mè
 C1S-write letter send 1S
 ‘He will write me a letter.’
 (Dahl_15_SO)

5. *ku-de woli wáà-ga wáà-tre Kpeta-ε?*
 C5S-road which 2S:POT-move 2S:POT-go Kpeta-CM
 ‘Which way does one pass to get to Kpuita?’
 (Interview_SM&MM)

6. *wáà-tani klɔ tsye ɔ-ga*
 2S:POT-canthere too SVCV-move
 ‘One can pass there too.’
 (Interview_GE&MM)

7. *áà-ze ní Ege*
 C1S:POT-be LOC Accra
 ‘He might be in Accra.’
 (R11191_AB)

8. *dzeni-a áà-dɔ* *Oholo kivo-e*
 rain-DEF C1S:POT-land:LOC Ho one.day.from.today-DEF
 ‘It might have rained in Ho yesterday.’

(RS09232_SO)

A future analysis becomes doubtful, however, when we note that the *â-* form is necessary when referring to a potential situation that does not fall into the domain of the subjunctive (example 9). Thus, potentiality is both a necessary and a sufficient condition for the use of this form, and so is much more likely to be basic to its semantic specification than future time reference.

9. **nyafê dzeni-ε ā-dɔ ní* *Oholo kivo-e*
 perhaps rain-DEF C1S-land LOC Ho one.day.from.today-DEF
 ‘It might have rained in Ho yesterday.’

(R11191_AB)

The final, and conclusive, reason for analysing this form as a potential mood with no inherent future tense specification is that while future time reference is assumed by default it can be easily cancelled, leaving only the potential meaning. Example 10 shows that where there is nothing to suggest a non-future reading speakers will assume a future time specification. Example 11 shows the same sentence with the adverbial *kivo-e* ‘the day one day from today’ which though it also does not explicitly include any past tense specification is most commonly interpreted as ‘yesterday’ rather than ‘tomorrow’. It is thus very telling that even this somewhat ambiguous term is sufficient to cause speakers to interpret the *â-* as indicating potentiality alone rather than futurity.

10. *áà-trε ní Ege*
 C1S:POT-go LOC Accra
 ‘He will go to Accra.’

(R11191_AB)

11. *áà-trε ní Ege kivo-e*
 C1S:POT-go LOC Accra one.day.from.today-DEF
 ‘He might have gone to Accra yesterday.’

(R11191_AB)

5.3 Subjunctive

The subjunctive is indicated by the use of subject agreement forms from either Set 2 or 3 depending on the verb (see Table 2). 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 *mɔ* ‘see’ and *tɔ* ‘cook’. 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 *te* ‘know’ and *pani* ‘speak’ are transitive but take Set 2 agreement and *ze* ‘be’ takes a PP complement and Set 3 agreement. A transitivity based distinction also does not explain the interchangeability of agreement forms for *mɔ* ‘see’ and *tɔ* ‘cook’. More research needs to be done to determine the motivation for the variation in subject agreement forms.

Table 2: Subject agreement forms in the subjunctive

Verb	Subject Agreement	Example (subjunctive subject agreement in bold)
<i>ze</i> ‘be’	Set 3	<i>li-nu si mi-ze ni ke-pe-a kivo</i> ‘I must be home tomorrow.’ (R11253_MM)
<i>sa</i> ‘hit’	Set 3	<i>li-nu si i-sa ye</i> ‘He must hit him.’ (R11253_MM)
<i>tre</i> ‘go’	Set 3	<i>li-nu si mi-tre Oholo</i> ‘I must go to Ho.’ (R11253_MM) <i>wó-pē wú-trē ní āmēkúkúbō-è mè</i> ‘You want to go to the cemetery.’ (Dir-cemetery_SO)
<i>vi</i> ‘ask’	Set 3	<i>mē mi-vi si kɔɔ, ku-de woli wáà-ga xe wáà-tre ní Bagblē-e?</i> ‘I wish to ask, which way do you go to get to Bagble?’ (Interview_GE&MM)
<i>dzi</i> ‘become’	Set 3	<i>mē mē-pe mi-dzi...</i> ‘As for me I want to become...’ (Interview_KA&RE)
<i>feke</i> ‘carry’	Set 3	<i>sì í-bá-fēkē bī-dòmē tō yí-kò bī-gōgō é-kpé kē mè</i> ‘...in order to pick up the thing to put the rest into it.’ (Pear_HO)
<i>kpese</i> ‘start’	Set 3	<i>xé wō-gà mū-ī wó-bītē wáà-sì lì-tó wò wú-kpēsē mū tàè tè</i> ‘When you move upwards you will start climbing a little then you turn right.’ (Dir-Gbadzeme_SO)
<i>mɔ</i> ‘see’	Set 2 or 3	<i>li-nu si ɔ-mɔ bε</i> ‘He must see them.’ (R11253_MM) <i>wu-mɔ kilie gi ɔpititi klɔ wɔ?</i> ‘Can you see the white clouds yonder?’ (Interview_SM&MM) <i>wèè-pē wū-mò kè-dziāmè-ε</i> ‘If you want to see the market’ (Dir-market_SO)
<i>tɔ</i> ‘cook’	Set 2 or 3	<i>li-nu si ɔ-dze ɔ-tɔ dɔ-mē</i> ‘The woman must cook something.’ (R11291_AB) <i>xe mē mi-tɔ i-tsre-ne o-no-e</i> ‘If I want to cook okra soup’ (Okra_AB)
<i>te</i> ‘know’	Set 2	<i>li-nu si o-te bε</i> ‘He must know it.’ (R11253_MM)
<i>dɔ</i> ‘land’	Set 2	<i>li-nu si e-dzeni ɔ-dɔ</i> ‘It must rain’ (R11253_MM)
<i>dɔ</i> ‘sleep’	Set 2	<i>li-nu si ɔ-zε-dɔ</i> ‘He must go and sleep.’ (R11251_AB)
<i>wɔli</i> ‘fall’	Set 2	<i>li-nu si ɔ-wɔli</i> ‘It (the orange) must fall.’ (R11253_MM)
<i>tse</i> ‘die’	Set 2	<i>li-nu si o-tse</i> ‘He must die.’ (R11253_MM)
<i>sε</i> ‘leave’	Set 2	<i>li-nu si ɔ-sε kivo-e</i> ‘He should have left yesterday.’ (R11253_MM)
<i>pani</i> ‘speak’	Set 2	<i>kō àblá-è gí ā-bá yà sì kū-pānì sì-yà-sē tō yī-nūī, blōō</i> ‘and now when she comes here and she is asking us to speak avatime dialect to her’ (Interview_KA&MO)
<i>mu</i> ‘climb’	Set 2	<i>fómizi-e o-mu trɔ ní ye ke-de-a</i> ‘The rabbit should climb on top of his back.’ (Duck_SO)

The subjunctive is used primarily in subordinate clauses. It is mainly used in the sentential objects of the verbs *nu* ‘be’ and *pε* ‘want’ (examples 0-14). With *pε* ‘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 (example 15). It is also used in subordinate clauses which express a reason or motivation for the main clause (example 16).

12. *li-nu si mi-ze ke-pe-a kivo*
 C3S-be COMP 1S.SBJV-be C6S-house-DEF one.day.from.today
 ‘I must be home tomorrow.’
 (R11253_MM)

13. *ma-pe si mi-se*
 1S-want COMP 1S.SBJV-run
 ‘I want to run.’
 (RS09052_SO)

14. *wó-pe wú-trē ní āmēkúkúbā-è mē*
 2S-want 2S.SBJV-go LOC cemetery-DEF in
 ‘You want to go to the cemetery.’
 (Dir-cemetery_SO)

15. *mà-pe sì wō-sē*
 1S-want COMP 2S-run
 ‘I want you to run.’
 (RS09052_SO)

16. *lě ē-mū kū ní lî-fū-nè sì ī-gū*
 then C1S-climb arrive LOC C3S-air-DEF COMP C1S.SBJV-pluck
 ‘Then he climbed the tree in order to pick them’
 (Pear_HO)

The subjunctive can also be used in main clauses. It is used to indicate that the speaker thinks the situation should hold and to make polite requests (examples 17-21).

17. *fòmizi-e o-mu trɔ ní ye ke-de-a*
 rabbit-DEF C1S.SBJV-climb put LOC C1S C6S-back-DEF
 ‘The rabbit should climb onto his back’
 (Duck_SO)

18. *ku-trē*
 1P.SBJV-go
 ‘We should go.’
 (Wake_WB)

19. *mi-kɔ le si wo-bi gbã-tɔ-ε, be-bi*
 1S.SBJV-take then COMP 2S-child first-one-DEF C1P-child
tia-se a-pɔ-ɔ?
 C1P-how.many C1S-born-QM
 ‘Let me take your first child then, how many children does he have?’
 (Interview_FO&MM)

20. *mi-bu be aba si ye*
 1S.SBJV-think C1P on tell C1S
 ‘Let me explain it to him.’
 (Ablabe_PA)

21. *mɛ mi-vi si kɔɔ kite Avatime ɔ-ma-nɔ mɛ e-ze tsãã?*
 1S 1S.SBJV-ask COMP so how Avatime C2S-town-DEF in C1S-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 is much more neutral in its presentation of situations as being possible. The only unusual thing is the same subject requirement with the verb *pɛ* ‘want’. It is not unheard of 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. I have no explanation for why the Avatime subjunctive behaves in this way. It is a matter which must be left for future research.

5.4 Imperative

The imperative is a slightly defective mood in that it only occurs in the 2nd person singular, in which case it is indicated by the bare verb without subject agreement (examples 22 and 23). Note that the optional aspect and modality markers can still be used (example 24). If the speaker wishes to give a directive to more than one addressee he or she must use the subjunctive (example 25). Also if the speaker wishes to give a directive to the 1st or 3rd person he or she must use the subjunctive as mentioned above in Section 5.3. The subjunctive can also be used to give directives to the 2nd person singular, in which case it is considered more polite than the imperative.

22. *ɲà bɨ-dɛ ya*
 eat C4S-thing this
 ‘Eat this!’

(RS09032_SO)

23. *kpese dɔ ni Kwami aba*
 start move.from LOC Kwami on
 ‘Start from Kwami.’

(Interview_GE&MM)

24. *zě-bí mé dzédzé là*
 REC-ask 1S another C3S
 ‘Ask me more things.’

(Interview_KA&MO)

25. *mlā-ɲà bɨ-dɛ ya*
 2P.SBJV-eat C4S-thing this
 ‘Eat this! (to more than one person)’

(RS09032_SO)

5.5 Jussive/Attenuative

There is a particle *t̄*, which is very commonly used in conjunction with the imperative and with the subjunctive when it is being used to give directives (examples 26-28). It precedes the whole verb complex (example 28) and does not participate in vowel harmony. So it is clearly a separate word not attached to the verb root. Funke (1909) analysed it as a jussive. However, in my sample it is mostly used with 2nd person directives and only very rarely with those directed to the 3rd person. In all cases the directive semantics is already indicated by either the imperative or subjunctive. Thus, it does not seem to function as a jussive, at least not currently in the Vane dialect. It was most frequently used in the Lego games, while the bare imperative or subjunctive was more frequently used in the interviews and conversations. The participants in these two sets of texts are often the same and both speakers in each set of texts tend to use the same form. So its usage is not determined by politeness in the same way as the distinction between the imperative and the subjunctive. Rather its usage likely relates to the nature of the task or situation that the Lego games occurred in. It could have something to do with giving directions but this seems an unlikely reason and it is not used in naturally occurring instances of direction giving. It seems more likely to be due to the formality or unfamiliarity of the situation and could be a kind of attenuative marker to tone down the intensional force of the imperative and subjunctive. More research into its uses is needed, however, to gain a proper understanding of its semantics.

26. *t̄* *trɛ* *ke-pe-a* *lɛ-ya* *mɛ*
 ATT go C6S-house-DEF C6S-this in
 ‘Go to this house.’

(Lego_AB&WO_2)

27. *xɛ* *wɔ-do ye* *se* *a-t̄* *ga* *mu*
 when 2S-exit C1S under ?-ATT move climb
 ‘When you’ve left, going underneath it, go upwards.’

(Lego_SN&EA)

28. *t̄* *mi-ga*
 ATT 1S.SBJV-move
 ‘I should come.’

(Lego_AB&WO_2)

A shift from a jussive to an attenuative particle is also in line with a shift in form that seems to be taking place. In 1909 Funke found that *t̄* always occurred with a prefix *â-*. However, this prefix only occasionally occurs in my sample (for instance example 27). It does not seem to alter the meaning of *t̄* in any way. It is optional in all uses of *t̄* and there is no apparent pattern to when it is or is not used in natural discourse. This prefix is reminiscent of the 3rd person singular subject agreement prefix but it clearly does not have this function currently because example 27 is directed to the 2nd person singular. It seems possible that the *â-* prefix was originally the 3rd person subject agreement prefix and the *t̄* was a verb. This combination may then have been grammaticalised as a jussive by the time Funke worked in Amedzofe in 1909. It may have been further grammaticalised since, at least in the Vane dialect, losing the *â-* and shifting from a jussive to an attenuative. Again this is only speculation and more research is needed to explain the usage and form of this particle.

5.6 Intentive

There is a prefix, *tá-*, which, in many ways, behaves very similarly to the potential mood *â-*. There are some important differences, though. Firstly, it occurs in a different slot in the verb and can be modified by other aspect and mood forms such as the subjunctive which the potential cannot. It also has a slightly different range of uses which I will explain below.

This form seems to correspond to the Amedzofe form *trá-* which Ford (1971a) described as an immediate future tense. However, it is clear that this analysis does not adequately describe its usage or the difference between this form and the potential *â-*, at least in the Vane dialect, because both forms are used for distant future situations (examples 29 and 30) and for near future situations (examples 31 and 32). In fact, Funke's (1909) analysis as an intentional mood seems highly accurate, as I will show below, though I have chosen to call it intentive, following Palmer's (2001) terminology.

29. *ege wo-ta-bite xe wo-tsi*
 what 2S-INT-do when 2S-grow
 'What are you going to do when you grow up?'
 (Interview_K&A)

30. *xé gi me-tsi-i máà-dzi li-gba bidi-e*
 when COMP 1S-grow-CM 1S:POT-buy C3S-building big-DEF
 'When I grow old I will buy a big house.'
 (Dahl_152_AB)

31. *kɔ ki-do suku o-mo-no-e xe gi¹ wo-ta-bite*
 so 1P-leave school C2S-day-DEF-CM CONJ COMP 2S-INT-do
 'So if you close from school today what are you going to do?'
 (Interview_KA&RE)

32. *kɔ xe gi wo-do suku-ε ege wáà-bite*
 so CONJ COMP 2S-leave school-CM what 2S:POT-do
 'So if you leave school what will you do?' (In reference to when he finishes later that day)
 (Interview_KA&RE)

There is a great deal of overlap in the use of the potential and this *tá-* prefix. Both are used to refer to future situations (examples 29-32), both can be used to refer to situations in the past though importantly the type of situation referred to in each case differs (examples 33 and 34), and both are used when giving directions (examples 35 and 36). 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 pressured, report a slight difference in meaning between sentences differing only in these two forms, though they find it very difficult to express and they often contradict themselves. In some cases speakers say that one of the sentences expresses an event nearer or further away in the future, though they often oscillate between which sentence they feel gives the impression of the

¹ Note that the combination of *xe* and *gi* in these types of constructions seems to indicate simultaneity of the two clauses. The order that the two clauses appear in seems to be determined by information structure and is otherwise not relevant for the interpretation of the utterance.

closer event. In other cases speakers say that one of the sentences indicates that the event is more likely to occur, but again either form may be used to indicate this increase of surety, and speakers often change their mind within minutes. The only consistent difference reported by speakers is that the *tá-* form cannot be used to indicate that the event may have occurred, while the potential can easily be interpreted in this way (examples 37 and 38). This lack of a potential semantics makes it look like a general future tense. Though as I shall show there are some problems with this analysis.

33. *bɛ-ta-ŋa* *dɔ*
 C1P-INT-eat thing
 ‘They were going to eat.’

(History_WO)

34. *báà-ŋa* *bj-dɔmɛ*
 C1P:POT-eat C4P-thing
 ‘They might have eaten.’

(RS09232_SO)

35. *wɔ-ta-ga* *ku-biakpa-de-o*
 2S-INT-move CS5-Biakpa-road-DEF
 ‘You take the Biakpa road’

(Interview_FO&MM)

36. *wáà-ga* *ku-biakpa-de-o*
 2S:POT-move CS5-Biakpa-road-DEF
 ‘You take the Biakpa road’

(Interview_GE&MM)

37. (*nyafɛ*) *Kofi* *áà-se* *kivo-e*
 perhaps Kofi C1S:POT-run one.day.from.today-DEF
 ‘Kofi might have run yesterday’

(R09261_SO)

38. **nyafɛ* *à-tá-se* *kivo-e*
 perhaps C1S-INT-run one.day.from.today-DEF
 ‘He might have run yesterday’

(R09261_SO)

While the *tá-* prefix is a more likely candidate than the potential was for a future tense, it has several properties which make a future tense analysis problematic. Firstly, it is not necessary to use it when referring to a future situation, in fact the potential is much more commonly used. Secondly, it is only used for future situations where the subject intends to perform the action, such as example 39. This is made especially clear by the fact that it is not used with inanimate subjects, indicating that it can in fact not be used unless the subject intends to perform the action. The potential can also be used in reference to intended actions (for instance example 32) but it is relatively rare in these contexts. Thirdly, a future tense analysis would not explain the difference in usage between *tá-* and the potential. Because both forms are used to describe future situations, and indeed when so used are almost always interchangeable. An intensive modal analysis would, however, account for the difference in distribution, because as noted above *tá-* is used overwhelmingly for intended actions while the

There are some examples which indicate that the negative aorist can be used to negate only the completion of an event rather than the whole event. This interpretation is particularly likely when there is a plural subject (examples 43 and 44). However, in further questioning conducted by Felix Ameka with Maxwell Gbagbo, an Avatime native speaker from Vane now living in Accra, these non-completed interpretations were not accepted. More research thus needs to be done to determine whether or not these interpretations are a real possibility and if so what the conditions on them are.

41. *ǝ-m̀* *ō-nī-yē*
 C1S:NEG-see C1S-person-DEF
 ‘He didn’t see the man.’

(Pear_HO)

42. *kú-tē* *kl̄* *gì* *ā-d̀*
 C1P:NEG-know there COMP C1S-move.from
 ‘We don’t know where she came from.’

(S11141_AB)

43. *i-mwe-ne í-ẁli*
 C2P-orange-DEF C2P:NEG-fall
 ‘The oranges did not fall.’/ ‘The oranges have not all fallen.’/ ‘The oranges are falling.’

(R11191_AB)

44. *á-bl̄-là* *é-tsē*
 C3P-snail-DEF C3P:NEG-die
 ‘The snails did not die.’/ ‘The snails have not all died.’/ ‘The snails are dying.’

(R09121_SO)

In the negative progressive, in addition to the floating high tone and Set 2 subject agreement the *ě*- progressive marker is replaced by *lí*- (examples 45-47). As you can see in example 47, this form is often used to express negative general states, rather than only more specifically currently ongoing situations like example 46.

45. *lě* *tsyē* *bá-lí-m̀* *yē*
 then too C1P:NEG-NEG.PROG-see C1S
 ‘There too they don’t see it.’

(Frog_SN)

46. *m̀-lí-ŋa* *blalí*
 1S:NEG-NEG.PROG-eat plantain
 ‘I am not eating plantain.’

(RS09032_SO)

47. *ǝ-lí-tānī* *gà* *m̀*
 C1S:NEG-NEG.PROG-can move good
 ‘He cannot walk well.’

(RS09221_SO)

In the negative habitual the *zě*- marker is removed leaving the rising tone which absorbs the floating high tone of the negative. Thus, the negative habitual is overtly marked by subject

agreement from Set 2 with a rising tone (examples 48 and 49). The negative habitual is very rarely used, in fact I have no examples of it occurring in natural speech.

48. *mǔ-tā* *kī-mīmī*
 1S:NEG.HAB-eat C4S-rice
 ‘I don’t usually eat rice.’

(RS09032_SO)

49. *mǔ-yō* *ǎ-līzātǎ-nō*
 1S:NEG.HAB-rise C2S-dawn-DEF
 ‘I don’t rise at dawn.’

(Dahl_71(negated)_SO)

The imperative and the subjunctive are both negated by the same form (examples 50-53). This form is distinct from the negative marker used to negate the aspects and I call it the prohibitive. The prohibitive actually requires the verb to also be marked for the subjunctive as can be seen by the fact that the subject agreement comes from either Set 2 or 3 depending on the verb rather than from Set 2 only (compare example 50 and 51). Unlike the general negative used for the aspects, the prohibitive is marked by *kú-* rather than a floating high tone². This *kú-* seems to be much closer to the verb and much less grammaticalised than the negative marker because it requires the subjunctive mood and participates in the same type of vowel alternations as the directional markers (example 51). These vowel alternations seem to be related to the vowels that precede the second verb in serial verb constructions and are likely a residue from a time when these prefixes were the initial verb in a SVC. Note that the verb *bīlè* ‘do’ is irregular in the 2nd person singular where *wō-kú-* reduces to *ú-*.

50. *wō-kú-trē* *ní* *lī-gbā-lē*
 2S.SBJV-PROH-go LOC C3S-building-DEF
 ‘Don’t go near the house.’

(Lego_AB&WO_3)

51. *áà-sí* *wō* *sí* *wu-ki-kpé* *yé* *o-nugu*
 C1S:POT-tell 2S COMP 2S.SBJV-PROH-put C1S C2S-mouth
 ‘He will tell you that you shouldn’t worry him.’

(Interview_GE&MM)

52. *ú-bìtē* *bī-dé* *lò*
 2S.SBJV.PROH-do C4S-thing there
 ‘Don’t do this thing.’ (Meaning don’t eat this)

(RS09032_SO)

² Note that it is not possible that the prohibitive also has a floating high tone which raises inherently low toned subject agreement markers to mid, because in the general negative the same Set 2 subject agreement markers become high before the floating high tone of the negative. It is in fact doubtful that the Set 2 subject agreement markers inherently have a low tone as it would be difficult to generate all the surface tones they take from this underlying form.

53. *mlā-kú-bītè* *bī-dé* *lò*
 2P.SBJV-PROH-do C4S-thing there
 ‘Don’t eat this.’ (Directed to more than one person)

(RS09032_SO)

It is worth noting here that combining the subjunctive or the imperative with the general negative would result in forms which are not distinguishable from forms in other categories. If we combine the subjunctive with the floating high tone of the negative we get forms with a high toned Set 2 or 3 subject agreement marker. In the first case these would be indistinguishable from the negative aorist and in the second we would get forms which are very similar to the negative habitual. If we combine the imperative with the floating high tone of the negative there is no change because there is no preceding subject agreement or even a subject NP to be raised. Thus there would be no difference between the affirmative and the negative imperative. Neither of these confluences of form is desirable and so it is quite reasonable that these combinations would be blocked by the system or the speakers themselves.

I believe that the negatives of the intensive, prospective and recurrent would be formed according to the type of basic aspect or mood marking used. However, I only have examples of the intensive and the recurrent negated in the aorist (examples 54 and 55), so it is also possible that they can only take this basic negative form, and even that the prospective cannot be negated at all.

54. *kù-nī* *kú-tá-ga* *bló* *sí* *za*
 C5S-water C5S:NEG-INT-move 1P middle pass
 ‘Water will not pass between us.’

(Interview_KA&RE)

55. *ǎ-glē* *lǎ-ya* *gì* *kpēsē* *mǎ-zě-yǎ* *ǎ-līzātǎ-nǎ*
 C2S-week C2S-this COMP start 1S:NEG-REC-rise C2S-dawn-DEF
 ‘I won’t rise at dawn this week.’

(Dahl_72(negated)_SO)

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 intensive, even if the intensive would not normally be used for that type of situation (example 56).

56. *ǎ-tá-bjē* *pǎ*
 C1S:NEG-INT-do finish
 ‘He might not have finished it.’

(R11191_AB)

I believe that this apparent gap in the negative paradigm is due to the loss of the segmental part of the full negative marker *bí-/lí-* which Funke (1909) and Ford (1971a) reported and which I found to be still present in the Amedzofe dialect. In Amedzofe this full negative marker is used to mark negation of all aspects, except for the aorist which is marked only by a floating high tone, and the potential mood (example 57). The subjunctive and imperative are still negated by the prohibitive rather than this general negative marker (Funke, 1909). My theory is that in the Vane dialect the segmental part of this negative marker was lost, leaving

only the floating high tone in all cases. This is the pattern of marking I have described above. The only difference is in the negative potential, which should be formed by Set 2 subject agreement + a floating high tone + \hat{a} . In this case the floating high tone would be absorbed by the falling tone of the potential and the difference in subject agreement set would only very rarely result in a different surface form due to the vowel assimilation process. The reason why there is no separate negative potential form in Vane thus becomes clear because addition of the negative marker results in no discernable difference in the surface form. Given this situation it seems likely that Vane speakers would extend the use of the negative intensitive to cover situations that call for the negative potential.

57. \hat{a} -b \acute{I} - \hat{a} -b \bar{I} t \acute{e} b \bar{e}
 C1S- NEG-POT-do C1P
 ‘He will not do it.’

(Ford, 1971a: 201)

Interestingly, Ford (1971a) reports a negative perfective form which I did not find in Vane. This form is used specifically to negate the completion of an event rather than to negate the event as a whole. It is constructed like the negative aorist but with the full negative marker rather than just the floating high tone (example 58). This is, thus, another case where loss of the segmental part of the negative marker in the Vane dialect provides a possible explanation for my data. If the segmental part of the negative marker was lost there would be no difference between this form and the negative aorist. This could explain why it is sometimes possible for speakers to interpret the negative aorist as indicating an uncompleted action. It could also provide an explanation for why some speakers reject these interpretations and others allow them as it likely depends on how much exposure they have had to the Amedzofe dialect, or any others which still maintain this difference. More research into this area is definitely needed to work out the details of this possible interpretation and determine whether or not this is a valid story.

58. \hat{a} -b \acute{I} -b \bar{a}
 C1S-NEG-come
 ‘He hasn’t come (yet).’

(Ford, 1971a: 191)

5.8 Summary

In this chapter I have described seven markers of modal notions: the potential, subjunctive, imperative, attenuative, negative, prohibitive, and the intensitive. These seven forms fall into three distinct groups. The first consists of the potential, subjunctive and imperative. These three form part of the core set of aspect and mood markers. Every Avatime clause must be marked for one and only one of these core categories. As these forms form part of the obligatory inflection system of Avatime verbs they are by my definition moods. The second group consists of the negative and the prohibitive. On their own neither form really fits with the rest of the system. The negative is highly grammaticalised as it is indicated by a floating high tone between the subject agreement and the obligatory aspect/mood marker, yet it does not form a part of the obligatory aspect/mood paradigm. The prohibitive on the other hand is highly ungrammaticalised as it not only requires subjunctive marking but still exhibits some vowel alternations indicating its origin as the initial verb of a serial verb construction. Yet it is distinguished from the other optional less grammaticalised aspect and mood markers, such as the recurrent, prospective and intensitive, by the fact that it can only occur in the subjunctive

where the other forms are more truly optional and can occur with a range, if not all, of the basic aspect and mood categories. These two dissimilar forms have a similar function in negating a clause and lie in complementary distribution, possibly due to the formal incompatibility of the negative with the subjunctive and imperative markers. Thus it is logical to posit a separate system of polarity marking in Avatime, where the positive is unmarked and the negative is marked by either the general negative or the prohibitive in the case of the subjunctive and imperative. Finally, there is the attenuative and the intensitive. The attenuative is clearly an optional, relatively ungrammaticalised form as it still exists as a separate word. The intensitive, though it is a bound morpheme, forms part of the optional set of aspect and modality markers. Hence, both of these forms are by my definition modals. Thus the Avatime mood and modality system consists of three moods (subjunctive, imperative and potential) and two modals (attenuative and intensitive). There is also a separate though related polarity marking system with an unmarked affirmative contrasting with the negative and prohibitive.

5.9 Typological comparison

5.9.1 General typological comparison

Avatime's mood and modality system is what Palmer (2001) refers to as a mixed system. There are some mood markers but they occur in the same paradigm as markers of other categories, in Avatime's case they occur with aspect markers. While mixed systems are less common than the usual binary indicative/subjunctive or realis/irrealis mood systems, they are certainly well attested (Palmer, 2001).

Avatime's inventory of moods is not unusual. While in general it is not very common to have both a potential and a subjunctive in the same paradigm, this sort of combination is fairly common in mixed systems. There is only one feature of Avatime's modality system which stands out as typologically unusual and that is that the subjunctive cannot occur in the complement of 'want' if the subject does not match that of the matrix clause. It would be interesting to investigate this restriction further and determine whether it also occurs with other verbs and if there is any apparent motivation for it.

5.9.2 Comparison to Ewe and other GTM languages

I shall only consider the mood markers in this comparison as there is not very much information available regarding modals in the other GTM languages. In contrast to the situation with the aspectual systems, where they all seem rather similar, Avatime's mood system is very similar to that of Ewe but quite different to those of the other GTM languages.

Ewe's mood system (Ameka, 2008), like that of Avatime, consists of a potential, subjunctive and an imperative. Furthermore, these forms seem to have similar semantics and properties to the Avatime categories. Though in Ewe, the subjunctive is not restricted to complement clauses of 'want' with the same subject as the main clause. Also in Ewe, the imperative can be used for persons other than the 2nd singular. One other difference is that in Ewe all of these forms including the potential can be negated, but the absence of a negative potential seems to be a historical quirk of the Vane dialect.

The three GTM languages, Lelemi (Allan, 1973), Logba (Dorvlo, 2008) and Tuwuli (Harley, 2008), have mood systems which differ greatly from that of Avatime. They all have a future tense but no potential mood and Logba has no subjunctive form. In fact their TAM systems

seem much more tense and aspect oriented while the TAM systems of Ewe and Avatime are strongly aspect and mood oriented. This later pattern is very typical of Kwa languages in general and the GTM languages are relatively unusual in the prominence they place on tense and their relative lack of mood. It will be interesting to see, as the TAM systems of more GTM languages are described, whether Avatime is unusual for a GTM language in being more Kwa like in this respect, or whether more of the GTM languages turn out to be aspect and mood prominent.

5.10 Conclusion

This chapter has described the mood and modality system of Avatime. I have found that it consists of three parts: three moods (potential, subjunctive and imperative) which form part of the obligatory mixed aspect and mood inflection system, two modals (attenuative and intensive), and a polarity marking system with an unmarked affirmative and a negative marked by either the general negative or the prohibitive.

I have compared the Avatime moods to the mood inventories of other GTM languages and Ewe. Unlike with the aspect inventories, I found that mood in Avatime is much more like Ewe than other GTM languages. This seems to correspond to the fact that both Avatime and Ewe are aspect and mood oriented languages while most described GTM languages are tense and aspect oriented. It will be very interesting to see how this pattern pans out as more GTM languages are described, and if Avatime remains highly atypical in this respect it would be very interesting to investigate possible reasons behind this divergence.

Of course there are still many questions remaining regarding mood and modality in Avatime. Some of the more pressing unresolved questions are: 1) The properties and use of the 'attenuative' *t̄s*; 2) Whether or not the aorist negative can be interpreted as only negating the completion of the event, and if so what the restrictions on this are; 3) More generally, the details of the semantics of negation and how this interacts with the rest of the TAM domain; and 4) What motivates the different subject agreement forms in the subjunctive? There are of course many other unresolved questions in the domain of mood and modality in Avatime but these are the most obvious and pressing following on from this description.

6 Summary and Questions for Future Research

In the preceding three chapters I have given an overview of aspect and modality in Avatime. I will now summarise the major findings. Firstly, the findings from Chapter 3 on situational aspect are summarised in Section 6.1. Then, the findings on morphological markers of viewpoint aspect and modality from Chapters 4 and 5 are summarised in Section 6.2. In Section 6.3 I give a brief look at how the whole aspect and modality system of Avatime compares to general typological trends. I will then give a list of some questions for future research in Section 6.4.

6.1 Situational aspect

Clauses in Avatime are divided into four grammatically distinct situational aspectual classes.

1) Actions are the most general class, expressing any dynamic situation which has at least some duration and is not irreversible. Actions are also the least grammatically restricted clauses and can occur with all the adverbials I tested: *(ní) onyɔsasa tole (me)* ‘in/for one hour’, *tsyitsya* ‘quickly’, *blewuu* ‘slowly’ and *taba* ‘twice’. Some examples of Action clauses are given in examples 1 and 2.

1. *a-ta* *kimimi*
C1S-eat rice
‘He ate rice.’

(R11231_MM)

2. *dzeni* *a-dɔ*
rain C1S-land
‘It rained.’

(R11171_SO)

2) The Uni-directional class is the next least restricted. Clauses in this class can occur with all adverbials tested except *taba* ‘twice’. This class is characterised by the irreversibility of the change expressed. This irreversibility gives these clauses their distinctive present end-state interpretation in the Aorist. Some examples of Uni-directionals are given below in examples 3 and 4.

3. *e-pe*
C1S-tire
‘He is tired.’

(R11171_SO)

4. *e-tse*
C1S-die
‘He is dead.’ or ‘He died.’

(R11171_SO)

3) The Punctual class has the opposite pattern of adverbial restrictions to the Uni-directional class. Clauses in this class can occur with all adverbials except *taba* ‘twice’. This class is characterised by a lack of duration, which motivates the restrictions on occurrence with the

adverbials and also gives them an iterative interpretation in the progressive. Some examples of Punctual clauses are given below in examples 5 and 6.

5. *a-sa* *yε*
 C1S-hit C1S
 ‘He hit him.’

(R11231_MM)

6. *a-ba*
 C1S-come
 ‘He came.’

(R11253_MM)

4) The final situational aspect class that I distinguish in Avatime is the State class, which is characterised by a lack of change. This lack of change means that clauses in this class cannot be modified by the adverbials *tsyitsya* ‘quickly’ and *blewuu* ‘slowly’. It also gives these clauses their distinctive persistent present reading in the progressive. Some examples of States are given in examples 7 and 8.

7. *kani-e* *a-su*
 light-DEF C1S-be.lit
 ‘The light is on.’

(R11231_MM)

8. *ɔ-lj* *nĩ* *ɔvanɔ*
 C1S-be.at LOC Vane
 ‘He is in Vane.’

(R11171_SO)

Distinguishing these four situational aspect classes is not only interesting in its own right it is also important for an understanding of the viewpoint aspects of Avatime. Each of these classes behaves differently when modified by the viewpoint aspects and these differences in behaviour can only be understood by an understanding of the semantic properties of the situational aspect classes as well as those of the morphological viewpoint aspects.

6.2 Viewpoint aspect and modality

I combine viewpoint and modality in this section because Avatime has a mixed inflectional system with markers of both viewpoint aspect and modality occurring together in the same paradigms (see Table 1 below). There is one basic obligatory set of categories for which all Avatime clauses must be marked. This set consists of the viewpoint aspects: aorist, progressive and habitual, and the moods: potential, subjunctive and imperative. There are three optional categories which can be marked on the verb in addition to the basic aspect or mood marking. These are the prospective and recurrent aspects and the intentive modal. It is not clear where on the verb the prospective is marked. It may occur in the same slot as the intentive mood in which case this is another mixed paradigm. If it occurs in the same slot as the recurrent aspect or a separate slot of its own then the optional modal and aspect categories are separated. Finally, there is a system of polarity marking. The affirmative is unmarked and the negative is indicated by a floating high tone between the subject agreement and the basic aspect and mood markers or in the case of the subjunctive and the imperative by the

combination of the subjunctive and the prohibitive *kú-* which is placed immediately before the verb¹

There is also one modal marker which occurs outside the verbal complex. That is the attenuative (*â*)-*t̄* particle which is placed immediately before the verb complex.

Table 1: List of aspect and modality categories and their forms

Set	Category	Subject Agreement	Morpheme	Position on verb
Basic/obligatory	Aorist	Set 1 (Set 2 for copulas and positionals)	None	AM 1
	Progressive	Set 1	ě- (lí- in the negative)	
	Habitual	Set 3	zě- (ˇ - in the negative)	
	Potential	Set 1	â-	
	Subjunctive	Set 2 or 3 (depends on verb)	None	
	Imperative	None	None	
Optional	Prospective	Determined by basic aspect/mood.	hà-	AM 2 or 3 (needs checking)
	Recurrent		zě-	AM 3
	Intentive		tá-	AM 2
	Affirmative		None	N/A
Polarity	Negative	Set 2	´-	Negative (before AM 1)
	Prohibitive	As for Subjunctive	kú-	Before verb

Contrary to earlier descriptions (Ford, 1971a; Funke, 1909) Avatime has no grammatical tense markers. The form which Ford analysed as a past tense is clearly better analysed as an aorist aspect. Because its time reference depends on the situational aspectual properties of the particular clause, more over this variation in time reference is predictable by a small set of pragmatic interpretation principles. The form which Ford and Funke described as a future tense is also better analysed as a potential mood. The forms that Ford describes as past, present and future progressive are more clearly described as the aorist recurrent, progressive and potential recurrent forms respectively. This analysis not only better matches their formal structure it also more accurately predicts their usage. For instance, the aorist recurrent form is used to refer to present situations in the exact same cases where a normal aorist would refer to present situations. The best candidate for a tense form in Avatime is the intentive, which was analysed by Ford as an immediate future. However, as I showed in Section 5.6, this form is better analysed as an intentive modal both because of its distribution and how it interacts with the rest of the aspect and mood system of Avatime. Therefore, I conclude that Avatime is a language without grammatical tense marking.

¹ Though it is not yet clear how this morpheme interacts with the directionals which also appear to be placed immediately before the verb.

6.3 Typological overview

Overall Avatime's aspect and modality system is fairly typologically normal. It has four situational aspect classes which are mostly similar to those found in other languages. It also has a mixed aspect and mood inflectional system with categories which are commonly found in other languages and a set of optional aspect and modality markers none of which are unusual. There are some things which are of typological interest though.

1) Avatime lacks a grammatical telicity distinction. This is highly unusual, especially in a language with four situational aspect classes as telicity is considered to be one of the most fundamental distinctions marked by situational aspect (Binnick, 1991). As yet there are only two languages, which are either closely related to or spoken nearby Avatime, for which we have situational aspect information: Ewe and Tuwuli. However, this small sample indicates that a lack of a grammatical telicity distinction may be an areal or familial phenomena as both these languages also appear to lack grammatical distinctions according to telicity (Ameka, pers.com.; Harley, 2008).

2) The Uni-directional situational aspect class that I propose is not a common situational aspect category. It would be worthwhile to investigate this category further to see if this is really the best semantic characterisation for this group of clauses. It would also be interesting to see if there are any other languages where this distinction is grammatically relevant.

3) The subjunctive has an unusual restriction. In general its use in subordinate clauses and to express desires and directives is quite common. What is unusual is that it only occurs in the complement of *pē* 'want' if the subject of the subordinate clause is identical with the subject of the main clause. As I mentioned in Section 5.2 it is not unusual for subjunctive use to be affected by subject choice, this particular pattern is unusual (Palmer, 2001).

4) The negative aorist is sometimes reported to allow a non-completed interpretation rather than a complete negation. It is not yet clear whether this interpretation is generally acceptable and if so under what conditions this interpretation arises. If this interpretation turns out to be generally acceptable it would be a highly unusual feature of the Avatime aspect and modality system. There is, however, a likely explanation for how it could have arisen. There is a separate non-completed marker in the Amedzofe dialect, however due to the loss of the segmental component of the negative marker in the Vane dialect this non-completive form became homophonous with the negative aorist, thus creating this unusual ambiguity.

5) It is interesting to note that while Avatime's aspect categories are much closer to those of other GTM languages, its mood categories are much closer to Ewe's. This corresponds to the fact that the other GTM languages which have so far been described have tense and aspect based TAM systems while Avatime and Ewe, and indeed most Kwa languages, have aspect and mood based TAM systems. It would be very interesting to look into why Avatime diverges from the GTM pattern and apparently reverts to the general Kwa pattern in this respect. However, at present many GTM languages are still under-described, in particular Avatime's closest relatives Nyangbo and Tafi. Thus, before such an investigation is considered it is necessary to determine the strength of the GTM tendency towards tense and aspect prominent TAM systems.

6.4 Questions for future research

All investigations uncover many questions that are not answerable within the investigation itself. This investigation into aspect and modality in Avatime has been no exception. Here follows a list of questions which would be interesting for future study.

- 1) In the realm of situational aspect I discovered no motivation for a telicity distinction in Avatime. This is typologically quite rare but upon comparison to nearby and related languages may in fact be an areal or familial tendency. It would thus be interesting to do further study on Avatime to determine whether or not there is a telicity distinction. It would also be interesting to study the neighbouring and related languages in more detail to determine whether or not they have a telicity distinction.
- 2) In this investigation I only considered sentential level situational aspect. It would be very interesting to study the situational aspect classes of Avatime verbs and how these combine in serial verb constructions.
- 3) In this thesis I have not discussed phase aspect. Phase aspect is indicated in several ways in Avatime. Finishing an event is indicated by a sentence final particle *pɔ* and beginning an event is indicated by the verb *kpēsē* ‘start’ with the verb describing the event occurring either as a nominalised object or the second verb in the serial verb construction. It would therefore be very interesting to see how other kinds of phase aspect are indicated and what the motivation for the different strategies may be.
- 4) I did not have enough data to determine where the prospective aspect occurs in the verbal complex, this would be a very simple but interesting question to address.
- 5) The subjunctive takes subject agreement from either Set 2 or Set 3. I was not able to determine a motivation for this difference though in many cases it depends on the particular verb. It would be very interesting to see what motivates this difference, or whether it is simply an unpredictable lexical property of verbs.
- 6) The subjunctive has an unusual restriction in the complement of *pē* ‘want’ to cases where the subject is identical to that of the matrix clause. It would be interesting to investigate this further, firstly to see if this restriction occurs with other verbs and secondly to search for a possible explanation for this restriction.
- 7) The semantics of negation and how the negative interacts with other parts of the sentence is often a very interesting area of grammar. I have only very briefly touched on this by noting that the general negative only occurs with the aspects and the prohibitive must be used to negate the subjunctive and imperative. I am sure that further investigation of negation in Avatime would be a profitable area for future research.
- 8) The negative aorist in particular would be an interesting area for future study. It seems that in the Amedzofe dialect there is a separate negative perfective form which is indistinguishable from the standard negative aorist in the Vane dialect. Some speakers of the Vane dialect report that the negative aorist can have an uncompleted interpretation as well as a full negation. It would be very interesting to investigate this interpretation more to see in what circumstances it is possible and with what speakers and whether it relates to the negative perfective in the Amedzofe dialect.

- 9) There is considerable variety in the form of the TAM systems of the various Avatime dialects. At present only the Amedzofe and Vane dialects have been described. It would, therefore, be very interesting to compare the form and semantics of the TAM systems across all of the Avatime dialects.
- 10) There are many ways of joining clauses in Avatime and they often express a temporal relation between the two clauses, though this temporal relationship seems to vary greatly according to the context. It would be very interesting to examine these clause coordinators in more detail, particularly in relation to the temporal relationships they express.
- 11) In general it would be very interesting to investigate how Avatime speakers indicate the sequence of events. This is a particularly interesting area in Avatime because it has no grammatical tense marking, the word for 'yesterday' and 'tomorrow' are the same, except that the definite form is generally used to mean 'yesterday' rather than 'tomorrow' and there are no good translations of English words such as 'before' and 'after'.

Appendices: Avatime texts

Appendix A Pear story

A retelling of the pear story by Happy Odzor, a 15 year old girl, to Mawutor Nyamevor, a 14 year old boy, at the Junior High School in Vane.

1. HO: *bē-kpēsē fīnì-yè*
C1P-start film-DEF
They started the film.

2. HO: *ò-kā-tò èé-gù bī-dòmē ní lī-fū-nè*
C1S-man-INDEF C1S:PROG-pluck C4P-thing LOC C3S-air-DEF
A certain man was picking something in the air.

3. HO: *bī-lí ŋwē sì pēyà*
C4P-be.at like COMP pear
It looks like pear.

4. HO: *èé-gù ní lī-fū-nè*
C1S:PROG-pluck LOC C3S-air-DEF
He is plucking from the air.

5. HO: *lé¹ à-gū kpē ní kù-sō-yò tū-bà mē*
then C1S-pluck put LOC C6P-basket-DEF C6P-two in
Then he put them into two of the baskets.

6. HO: *à-gū tō-lē gi ò-gū pēyà*
C1S-pluck C1S-one COMP C1S.SBJV-pluck pear
He left one to fill with pears (later).

7. HO: *lě ē-mū kū ní lī-fū-nè sì ī-gū*
when C1S-climb arrive LOC C3S-air-DEF COMP C1S.LOG.SBJV-pluck
When he was up in the tree picking,

8. HO: *lě ò-nō-tō à-kò gāsō-yē xé ā-bá-fēkē-é*
CONJ C1S-man-INDEF C1S-take bike-DEF CONJ C1S-VENT-carry-CM
another man on a bicycle came and took them.

9. HO: *lé ā-bá-fēkē kà-sō-yà trō ní gāsó-yē àbǎ*
CONJ C1S-VENT-carry C6S-basket-DEF put LOC bike-DEF on
He came and picked the basket up and put it on the bicycle.

¹ Note this is a conjunction which is translated into English as ‘then’, ‘when’ or ‘and’. It is also generally used at the beginning of each clause in a section of narrative, seemingly to give continuity. I have not included it in the English translations where it is used only to give continuity as the constant use of ‘then’ or ‘and’ in English becomes tiresome.

10. HO: *lé ā-kò sē-nó*
 then C1S-take leave-COM
 Then he took them away.
11. MN: *ś-mò ò-nī-yē?*
 C1S:NEG-see C1S-person-DEF
 He didn't see the person?
12. HO: *m̀m ś-tīnǐ lì-fū-nè*
 nah C1S-stand:LOC C3S-air-DEF
 Nah, he was at the top.
13. HO: *lě ā-sē è-é-trē rìdìdì*
 CONJ C1S-leave C1S:PROG-go far
 He left and went far away.
14. HO: *lě ā-zě-tsānì bá-nò à-tō ní kū-dè-ō mě*
 CONJ C1S-IT-meet C1P-person some LOC C5S-road-DEF in
 He met some people on the way
15. HO: *sì í-bīté kò lě é-gléè*
 COMP C1S.SBJV-do TOP CONJ C1S-fall
 He fell down because he did it (stole the pears),²
16. HO: *lě bánálò bēpōnì yě*
lě bá-nò bá-lò bē-pōnì yě
 and C1P-person C1P-those C1P-help C1S
 and those people helped him
17. HO: *lě á-hálí bī-dòmē kpé kà-sō-yā mě*
 then C1S-collect C4P-thing put:LOC C6S-basket-DEF in
 Then he collected the things and put them into the basket
18. HO: *lě gì bánálò tsyé gì bētábágá lō zà*
lě gì bá-nò bá-lò tsyé gì
 CONJ COMP C1P-person C1P-those also COMP
bē-tá-bá-gá lō zà
 C1P-INT-VENT-move:LOC there pass
 Those people also will come and pass through the place.

² The speaker thought that the boy fell off his bike because he had done a bad thing by stealing the man's pears.

19. HO: *lě lósó yē ā-sī bà sì*
 and because.of C1S C1S-tell C1P COMP
xé gí bēézē bā-kú-dò lì-bòbòē sì...
 CONJ COMP C1P:PROG-pass:CM C1P.SBJV-PROH-say C3S-anything COMP
 And because of that, he tells them that when they are passing they shouldn't say anything...
20. HO: *bā-kú-dò lì-bòbòē sì ̄-kē*
 C1P.SBJV-PROH-say C3S-anything COMP C1S-man
 They shouldn't tell the man anything
21. HO: *lé lósó gí ̄-kē-ē ē-plē ní*
 so because.of COMP C1S-man-DEF C1S-descend LOC
ò-sē-lō mè
 C2S-tree-DEF in
 So because of that the man came down from the tree,
22. HO: *si ī-bá-fēkē bī-dòmē tō yí-kò*
 COMP C1S.SBJV-VENT-carry C4P-thing ATT C1S.LOG.SBJV-take
bī-gōgō é-kpé kē mè
 C4P-rest SVCV-put:LOC C6S in
 in order to pick up the basket to put the rest into it.
23. HO: *ómò bīdòmē tò*
 C1S:NEG-see C4P-thing some
 He didn't see it at all.
24. HO: *tū-lē kǒ bì-lē lò*
 C6S-one just C4P-stand there
 Just one (basket) was there.
25. HO: *lě bá-yà kō bē-bá-zā-ē*
 so C1P-these TOP C1P-VENT-pass-CM
 So these people just passed by the man.
26. HO: *lé ̄-kē èé-dī bā hàà*
 CONJ C1S-man C1S:PROG-look C1P ?
 The man was looking at them.
27. HO: *lé kò fīmí-yè ē-wūnī*
 CONJ so film-DEF C1S-finish
 So, this is the end of the film.
28. HO: *bē-kú bē-lò*
 C1P-arrive:LOC C4P-that
 That is it. (Lit: They have arrived at that)

29. MN: *lě gi ɔ-mò bē ɔ-sè?*
 so COMP C1S:NEG-see C1P C1S:NEG-leave
 So because he did not see them he did not leave there?
30. HO: *ô ɔ-lé lò*
 no C1S-stand there
 No it is there.
31. HO: *āgū bí-tō kpē ní lì-wù-lē mē*
 C1S-pluck C4P-? put LOC C3S-hand-DEF in
 He plucked another load. (Lit. He plucked another one and put it in the hand.)
32. HO: *àblí ā-tá-kō kpé kà-sō-yà mē*
 now C1S-INT-take put C6S-basket-DEF in
 Now he is going to put the rest into the basket.
33. HO: *lé lúsō ɔ-lē èé-dí bā-lò*
 CONJ ? C1S-stand C1S:PROG-look C1P-those
 He was standing there looking at them.
34. HO: *ɔ-lé àtsūrē sū*
 C1S-stand:LOC ladder behind
 He stood behind the ladder.
35. MN: *péyā àló kòkò?*
 pear or coco
 Is it a pear or coco?
36. HO: *péyā*
 pear
 Pear.

Appendix B Father reprimanding his daughter

In this text a father, Eric, rouses on his daughter, Abitele. It is an excerpt from a larger conversation (Conv_SO,ErA,VA&AA)

1. E: *do be-ta-kɔ wo ku-nugu-yo tsini yefɔna*
 speak C1P-INT-take 2S C5S-speech-DEF take whites
loso me (xxx) gu kunuguyo
 therefore 1S (xxx) ? C5S-speech-DEF
 Speak! They are going to take your message to the whites therefore I want you to talk.
2. A: *mɛ-sj le...*
 1S-say that
 I said...
3. E: *do gaglaa*
 speak strong
 Say it louder.
4. A: *mɛ-sj le...*
 1S-say that
 I said...
5. E: *mama sj le...*
 mama say that
 Mama said...
6. A: *mama sj le kɪ-bɔ-ɛ tɔtɔ kɪ-ma ya-wla*
 mama say that C4S-money-DEF none C4S-be.NEG:LOC C1S.LOG-hand
 Mama said she has no money.
7. A: *losoe a-sj le i-ta-ki mɛ kɪ-bɔ-ɛ*
 therefore C1S-say that C1S.SBJV-INT-give 1S C4S-money-DEF
xe máà-dzi watsye
 CONJ 1S-buy watsye
 Therefore, she said that he will give me money and I will buy watsye.
8. E: *le loso zi kɪ-bɔ-ɛ mɔ-wla*
 then because.of ? C4S-money-DEF 1S-hand
tɔ mi-bjɛ ege?
 ATT 1S.SBJV-do what
 So collect money from me to do what with it?
9. A: *tɔ mi-dzi watsye*
 ATT 1S.SBJV-buy watsye
 So that I buy watsye

10. E: *a-ki wɔ bi-dɔmɛ (xxx) wɔ-ŋa xe wɔ-sɛ ke-pe-a-mɛ?*
C1S-give 2S C4P-thing (xxx) 2S-eat CONJ 2S-leave C6S-house-DEF-in
Has she given you food and did you eat before leaving the home?

11. A: *ee*
yes
yes

12. E: *ege wɔ-ŋa?*
what 2S-eat
What did you eat?

13. A: *amɔwɔ*
banku
banku

14. E: *amɔwɔ*
banku
banku

15. E: *le wɛ́-é-bɛmeni me*
and 2S:PROG-deceive 1S
And you are deceiving me.

16. E: *bi-pe?*
C4P-be.good
Is it good?

17. A: *ô*
no
No.

18. E: *bi-pe?*
C4P-be.good
Is it good?

19. A: *ô*
no
No.

20. E: *bí-pe bameni wɔ-ka*
C4P:NEG-be.good deceive.neg? 2S-father
It is not good you don't deceive your father.

21. E: *xe wɔ-ŋa dɔme ke-pe-a-me*
 CONJ 2S-eat thing C6S-house-DEF-in
 After you have eaten in the house
22. E: *le wɔ-basa a-sia-na kpe awuna-wla si wo-ne*
 and 2S-show C3P-lie-DEF put face-hand COMP 2S-mother
 and you are lying to me against your mother,
23. E: *sɪ kɪ-bɔ-ɛ ki mɔ ya le loso*
 say C4S-money-DEF give 1S this CONJ therefore
me mi-dzi dɔme ki wɔ tɔ ŋa tɔ trɛ suku
 1S 1S.SBJV-buy thing give 2S ATT eat ATT go school
 saying “give me money” so that I buy something for you in order to eat in order to go
 to school.
24. A: *ee*
 yes
 yes
25. E: *nite gi bèé-bite*
 how COMP C1P:PROG-do
 Is that how people behave?
26. A: *ô*
 no
 no
27. E: *kivo wu-bite te tɔ lo*
 one.day.from.today 2S.SBJV-do like.this stop there
 Tomorrow don’t behave like that
28. A: *yoo*
 ok
 ok

Appendix C Interview Kennedy and Mawulolo

An interview between Kennedy Adipa, a 14 year old boy, and Mawulolo Onipaneya, a 16 year old girl, at the Junior High School. They were asked to ask each other about what they wanted to do when they grew up, what they had done the day before and what they were going to do the next day.

1. K: *xé wó-tsi-ī lī-xwè wólí wō-tá-wà-à?*
when 2S-grow-CM C3S-work which 2S-INT-do-QM
When you grow up what work are you going to do?
2. M: *xé gí mé-tsi-ī máà-táni bīsìnèss í-bītē*
when COMP 1S-grow-CM 1S:POT-can business SVCV-do
When I grow I might undertake business.
3. M: *máà-táni zē teáchèr máà-taní zē nūrse*
1S:POT-can be teacher 1S:POT-can be nurse
I might be a teacher I might be a nurse,
4. M: *gì lí-we é-tō mē-fē má-wā ā-xwè-nā nì isū-mè*
COMP C3S-day C3S-some 1S-? 1S-do C3P-work-DEF and self-1S
kū pèpèè gí mā-kōō dī mō-kà nì mō-nē
arrive? IDEO COMP 1S-take? look? 1S-father and 1S-mother
āvāé lē kó lí-hiā mē-ē
? CONJ? just? C3S-need? 1S-CM
which I can also undertake hard workingly to please my parents and my self.
5. K: *kivò pò nífō wò-tá-trē-è?*
one.day.from.today TM where 2S-INT-go-QM
Where will you go tomorrow?
6. M: *kivò kivò kī-tá-bá sūkū*
one.day.from.today one.day.from.today 1P-INT-come:LOC school
Tomorrow, tomorrow we will come to school.
7. M: *lósō kī-tá-bá-kpásī bī-dòmē kivò sēriòùs*
because 1P-INT-VENT-learn C4P-thing one.day.from.today serious
lēsē sì blō ē-pá-lā ē-ná pó
lesson COMP 1P C3P-exam?-DEF C3P-reach but
gì kī-lē-ηwlīmì dōdókpóé-é
COMP 1P-REC-write IDEO-CM
We will come learn serious lessons tomorrow because it is almost examination time.
8. K: *lī-xwé wólí wō-wà kīvō-ē pò?*
C3S-work which 2S-do one.day.from.today-DEF finish
What work did you do yesterday?

9. M: *kīvō-ē-ē* *kīvō-ē* *gì* *kī-dó*
 one.day.from.today-DEF-TM one.day.from.today-DEF COMP 1P-exit:LOC
sūkú-ì *mèé-tsē* *lī-tūkpō-lè* *lī-tā* *mé*
 school-CM 1S:PROG-die C3S-head-DEF C3S:PROG-hurt 1S
 Yesterday, yesterday when I came from school I was sick with a headache.
10. M: *lòsōē* *ā-sí* *kú-bá* *ā-xwè-nā*
 so C1S-tell 1P.SUBJ-come:LOC C3P-work-DEF
 So he said we should come and work,
11. M: *mē* *mó-tà* *ā-xwè-nā* *mé* *bā*
 1S 1S:NEG-eat C3P-work-DEF 1S/in? come
 as for me I didn't work.
12. M: *lě* *mā-sī* *Rōse* *sì* *xé* *gì* *ā-bā* *ā-tō* *ó-bí*
 and 1S-tell Rose COMP CONJ COMP C1S-come ?-ATT C1S.SBJV-obtain?
kū-dō-ō *mé*
 C5S-way-DEF 1S
 And I told Rose that when she goes she should obtain permission for me,
13. M: *pò* *Súsàn* *sī* *gì* *bèé-tá-bā-ē* *bē-tsāni* *Róse*
 but Susan tell COMP 1P:PROG-INT-come-CM 1P-meet Rose:LOC
kū-dō-ō *mé*
 C5S-road-DEF in
 but Susan said that when they were coming back they met Rose on the road.
14. M: *lòsōē* *Rōse* *ó-kū* *kpōdzī-ì*
 so Rose C1S:NEG-arrive campus-CM
 So Rose didn't reach campus.
15. M: *lé* *mèé-sì* *mē* *tófiē* *ā-līlā*
 and 1S:PROG-tell 1S? toffee C1S-be.lost
 And I told her that my toffee got lost.
16. M: *xé* *gì* *ā-bā* *sūkú* *kpōdzī-ì*
 CONJ COMP C1S-come school campus-CM
 So when she comes to the compound
17. M: *tō* *xé* *gì* *ā-mò* *yē* *ē-tō-kō-ē* *māni* *mē*
 ATT CONJ COMP C1S-see C1S ?-ATT-take-SVCV bring 1S
 if she sees it she should bring it to me.
18. M: *zě-ví* *mē* *ē-dzēdzē* *là* *dzè*
 REC-ask 1S C1S-different thing again
 Ask me another thing again.

19. K: *xé kì-dō sūkú òmōnò-ē ēgē wō-tá-bìtē-è?*
 when 1P-exit school today-CM what 2S-INT-do-QM
 When we leave school today what are you going to do?
20. M: *xé kì-dō sūkú-ì nyāfé kí-trě kàmfrì kpōdzì*
 when 1P-exit school-CM perhaps 1P-go:LOC church campus
 When we close from school perhaps we'll go to the chapel.
21. M: *kī-lě-kpāsī bī-dòmē*
 1P-REC-learn C4P-thing
 We will learn something.
22. M: *lēsē sī kī-tá-dzī kē-lílí*
 because COMP 1P-INT-become C6S-full.member?
ā-sì dízembā mē-è ó-dzídzí gōgò-ē mē
 C1S-tell? december in-CM C1S-last month-DEF in
 Because we'll become full members of the church in December, the last month.
23. M: *zě-ví mē ē-dzēdzē là dzè*
 REC-ask 1S C1S-different thing again
 Ask me another thing again.
24. K: *lí-xwē wólí wō-kà èé-wà?*
 C3S-work which 2S-father C1S:PROG-do
 What work does your father do?
25. M: *mō-kà-è teáchér ō-nū*
 1S-father-TM teacher C1S-be
 My father is a teacher.
26. M: *mō-nè pò èé-dà bī-dòmē ní fīāsēē mē, fīāsēē mē*
 1S-mother TM C1S:PROG-sell C4P-thing LOC shop in shop in
 My mother is selling things in a store, a store.
27. M: *zě-ví mē dzēdzē là*
 REC-ask 1S different thing
 Ask me another thing.
28. K: *nyāwé kō wō-lé-è?*
 who TM 2S-stand-QM
 Who do you stay with?
29. M: *Dā Gráce mē-nē-dā nì yē-nyē Gēfīò Kōmlá wló mōlées*
 sister Grace 1S-mother-sister and C1S-husband Gefio Komla place 1S-stand
 I'm staying with Sister Grace, my mother's sister, and her husband Mr Tete Komla.

30. M: *bèé-wā ā-xwèè*
 C1P:PROG-do C3P-work
 Thanks to them. (Lit: They are doing work.)
31. M: *ē mō-kà èé-ḡwlīmì lótō-ē mō-nè mō-nè pō*
 eh 1S-father C1S:PROG-write ?-DEF 1S-mother 1S-mother TM
yé īsu-á mē lí-pē
 C1S:LOC self-C1S in C3S:NEG-be.good
lósò ǝ-lí-tānì ðkókō dzē-ē
 so C1S:NEG-PROG-can ? again?-CM
 My father is the upkeeper of the house and as for my mother she's not sound
 in her mind so she does not go anywhere.
32. K: *wō tsyē vī mē*
 2S also ask 1S
 You too ask me.
33. M: *kīvō-ē kī-dó sūkū lí-xwē wólí wō-wà-à*
 one.day.from.today-DEF 1P-exit school C3S-work which 2S-do-QM
 When we left school yesterday what work did you do?
34. K: *mò-dzē le mò-lě-tó dòmē-ē*
 1S.SBJV?-go and 1S.SBJV?-REC-cook thing-CM
lé mā-bá ā-xwè-nā mē-ē
 and 1S-come:LOC C3P-work-DEF in-CM
 I went and cooked and came to work at the school compound.
35. K: *lě dzéni-ē ā-bá tū blō kò lě kui-dzī sē-ē*
 CONJ rain-DEF C1S-come:SVCV? first 1P so? and 1P-return leave-CM
 Rain arrived before us and so we returned home.
36. M: *xé gí wó-tsi-ī lí-xwē wólí wò-tá-wà-à?*
 CONJ COMP 2S-grow-CM C3S-work which 2S-INT-do-QM
 If you grow what work are you going to do?
37. K: *mōō pláne mōō mò-tá-kū-ū*
 1S plane 1S 1S.SBJV-INT-drive-CM
 I'll become a pilot
38. M: *ēē kù-dzídzi wólí wō-kà-tsi-ē ā-tā sī wō*
 eh C6S-tale which 2S-father-old-DEF C1S-eat? tell 2S
ō-dí-ì?
 SVCV-sit?-QM
 eh which tales has your grandfather ever told you?

39. K: *ó-tā k̄ā-tótó sī mó ó-dī lō*
 C1S:NEG-eat C6S:none tell 1S SVCV-sit? EXCL
 He didn't tell me any stories!
40. M: *kōē āblá-è gī kú-má sūkū kpōdzi*
 so now-TM COMP 1P:NEG-be.NEG:LOC school campus
xé bēé-kpási bī-dòmē-ē kō kíté kī-tá-bíté kī-tá-tē-è?
 when C1P:PROG-learn C4P-thing-CM so how 1P-INT-do 1P-INT-know-QM
 Now that we are not at the school when they learn how are we going to manage to know it?
41. K: *kī-zì nótēv-á ì-hā-lé wló kíà-ḡwlimì*
 1P-collect? note-DEF C2P-friend-DEF:LOC there 1P:POT-write
 We shall collect notes from our friends and copy.
42. M: *xé kī-zì nótē-á blō ì-hā-lé wló kī-kōpī-ī*
 when 1P-collect? note-DEF 1P C2P-friend-DEF:LOC there 1P-copy-CM
 When we collect notes from our friends and copy,
43. M: *kú-tá-tē kīlìè bē-ēxpáin kīlīē gī bē-bū lēsē*
 1P:NEG-INT-know how C1P-explain how COMP C1P-think lesson
kí bē-ē
 give C1P?-CM
 we will not know exactly how they explained it to them.
44. M: *bá-tá-tānì lēsē bū kī blō ḡuàdí*
 C1P:NEG-INT-can lesson think give 1P exactly?
sī òdòbàsī-ē bū lēsē kī blō dzāā
 COMP teacher-DEF think lesson give 1P ?
 They can't explain it to us how our teacher always explains to us.
45. K: *xé wō-klà dòmē kò wáà-nū lēsē*
 if 2S-read hing then 2S:POT-hear lesson
 If you read the thing you will understand it.
46. M: *xé gī wō-klà bē wáà-nú lēsē pò-è*
 CONJ COMP 2S-read C4P 2S:POT-hear lesson but-CM
kīlìè òdòbàsī-ē ē-bū lēsē bū-nò-è
 how teacher-DEF C1S-think lesson think-COM-CM
 If you read it you will understand but how the teacher really explained it.
47. M: *wótá... wótátā... kīlìè gī òdòbàsī-ē bū lēsē*
 2S:NEG-INT 2S:NEG-INT-can how COMP teacher-DEF think lesson
bū-nò-è blō ì-hā
 think-COM-CM? 1P C2P-friend
 You can't understand how the teacher explained to our friends.

48. M: *lē bá-tá-tāni lēsē bū tē-ē*
 and C1P:NEG-INT-can lesson think like-CM
 And they can't explain it to us as such.
49. K: *wáà-tāni ɔ̀d̀d̀bàsī-ē tī p̀ǹd̀ wáà-bī yē*
 2S:POT-can teacher-DEF follow help 2S:POT-ask C1S
 You can approach the teacher and ask him.
50. M: *xé g̀i kī-bī yē k̄ ē-bū lēsē ḱ bl̄*
 CONJ COMP 1P-ask C1S and C1S-think lesson give 1P
ā-ní tē-è ā-ní tē-è?
 ?-that.is like-QM ?-that.is like-QM
 When you approach the teacher and he explains it to you is that really how he explained it to your friends?
51. M: *wó-tá... wó-tá-tā... kílìè g̀i ɔ̀d̀d̀bàsī-ē bū lēsē*
 2S:NEG-INT 2S:NEG-INT-can how COMP teacher-DEF think lesson
bū-nò-è bl̄ ì-hā
 think-COM-CM? 1P C2P-friend
 You can't understand how the teacher explained to our friends.
52. M: *k̄ àblá-è g̀i ā-bá yà s̀i k̄-pā-nì*
 and now-TM COMP C1S-come:LOC here tell 1P:SBJV-talk-COM
s̀i-yà-sē t̀d̀ yī-nū-ī bl̄-ɔ̀
 C7-language-DEF ATT C1S.LOG.SBJV-hear-? 1P-CM
kī-tá-pā-nì sē ā-tá-nū
 1P-INT-talk-COM C7 C1S-INT-hear
 And now when she comes here and asks us to speak the Avatime language to her, is she understanding it?
53. M: *ā-tá-tāni sē ɲwlimì àbláá?*
 C1S-INT-can C7 write now
 Can she write it?
54. K: *nī tē yē ɔ̀t̄ s̀i yèé-d̄o*
 that.is like C1S C1S-some tell C1S.LOG:PROG-say
 That is what she is saying.
55. M: *àà ókāy*
 ah okay
 Ah okay.

56. M: *kō àblá-è xé kī-bī kū-dè-ō yē wlò nyàfě*
 and now-TM when 1P-ask C5S-way-DEF C1S place perhaps
ā-tá-kī sì kī-tá-zè yà lī-wè-lē pētēē dǎ?
 C1S-INT-give COMP 1P-INT-be here C3S-day-DEF all ?
 And now when we ask permission from her maybe she will ask us to stay for the whole day.

57. K: *lī-wè-lē pētēē wáà-dimē sì wáà-zè yā-á?*
 C3S-day-DEF all 2S:POT-like COMP 2S:POT-be here-QM
 Can you stay here the whole day?

58. K: *wō-zōōtá?*
 2S-?
 Are you sure?

59. M: *blō ì-hā-lē mē pētēē à-ŋwē wō-sàà dimē-nò?*
 1P C2P-friend-DEF in? all C1S-like 2S-? like-COM
 Among all our friends whom do you like best?

60. K: *ō-tótō!*
 C1S-none
 No one!

61. M: *wō-dimē-nì ò-tótō?*
 2S:NEG-like-COM C1S-none
 You don't like anyone?

62. M: *ègé lēlósò?*
 what why
 For what reason?

63. K: *bé-lí-bù mē*
 C1P:NEG-PROG-think 1S
 They don't respect me.

64. M: *à kō lēsē sì wó-tsī sàni bā*
 ah and because COMP 2S-grow more.than C1P
 Ah, because you are more grown than them.

65. M: *ā-ní tē lósó bé-lí-bù wō-è?*
 ?-that.is like reason C1P:NEG-PROG-think 2S-QM
 Is that why they aren't respecting you?

66. M: *kō xé gí wō-bù isù-wà*
 CONJ CONJ COMP 2S-think self-2S
kō à-ní lē bā tsyē báà-bù wō-è?
 CONJ ?-that.is CONJ C1P also C1P:POT-think 2S-QM
 If you respect yourself is it not then that they will also respect you?
67. M: *wèé-bū isū-wà-á?*
 2S:PROG-think self-2S-QM
 Do you respect yourself?
68. K: *lī-nū sī bā-bù mē gbá*
 C3S-be COMP C1P.SBJV-think 1S first
 They should respect me first.
69. M: *wèébù isū-wàá?*
 2S:PROG-think self-2S-QM
 Are you respecting yourself?
70. K: mm
 yeah
 Yeah.
71. M: *ā-sì xé gí ǰ-nǝ-tsí ē-bù ǰ-nǝ-vǝ*
 C1S-tell CONJ COMP C1S-person-old C1S-think C1S-person-young
kō ǰ-nǝ-vǝ tsyē èé-bù ǰ-nǝ-tsí-í
 then C1S-person-young also C1S:PROG-think C1S-person-old-CM
 It is said that if an elderly respects the young then the young too shall respect him.
72. K: *nī tē-è?*
 that.is like-DEF
 Is that so?
73. M: *pǝ xé gí wó-bù isū-bà bá-tá-bù wō dzàà*
 but CONJ COMP 2S:NEG-think self-C1P C1P:NEG-INT-think 2S again
 But if you don't respect them they won't respect you.

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