## Talking about motion in Avatime.



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Master's thesis

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October 20, 2009

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## List of abbreviations

| 1 | first person |
| :--- | :--- |
| 2 | second person |
| ATT | attentuative |
| C | noun class (followed by a number indicating the class number) |
| CM | clause marker <br> COM |
| comitative |  |
| COMP | complementizer |
| DEF | definite |
| EXCL | exclamation |
| HAB | habitual |
| ID | ideophone |
| IND | indefinite |
| INT | intentive |
| IT | itive |
| LOC | locative |
| LOG | logophoric |
| NEG | negative |
| P | plural |
| POT | potential |
| PROG | progressive |
| Q | question marker |
| REC | recurrent |
| RED | reduplication |
| S | singular |
| SUBJ | subjunctive |
| SVM | serial verb marker |
| TOP | topic |
| VEN | ventive |
|  |  |

## Map of the Avatime area



The main map shows the Avatime area and some surrounding villages. The inlay shows the location of the Avatime area within the wider area. (Source: Brydon, 2008 : 25)

## Acknowledgements

The research this thesis is based upon would not have been possible without the generous financial support of the Endangered Languages Documentation Programme, in the form of a Field Trip Grant. Many thanks for enabling us to spend four months collecting data in Vane.

I would also like to express my gratitude to all the people who have assisted us in various ways in Vane. Thanks to Osie Adza Tekpor VII, Onetsitsie Osei Yawa VIII and the chiefs and elders of Vane for welcoming us in their area so warmly. I am also grateful for all the help of the following people: Valentine Amedo, Kudjo Djoborson Gbagbo, Maxwell Gbagbo, Wisdom and Agi Ekissi, Divine Mununkum, Lena and Sacha Vinokurov and the teachers of the Junior Secondary School in Vane. Special thanks are due to Manfred Apati for transcribing so many of our texts.

Of course, my research would not have been possible without the help of all the Avatime people who have allowed us to record them and discussed their language with us. I cannot thank them all here, but their names are mentioned where they are quoted in this thesis. I would like to thank personally four people who have been of invaluable assistance: Sammy Kwami Oboni, Mathias Mahunu, Walter Ray Ofasi and Charlotte Adzoyo Bakudie. Thank you very much for patiently working with us almost every day.

I am immensely grateful to my supervisor Felix Ameka. Thank you for always reserving time for me in your busy schedules and for all your support and encouragement over the years. Akpe kakakakaka!

I am also grateful to Lisa Cheng for agreeing to be my second reader and to all the other teachers in the African Linguistics and General Linguistics departments in Leiden who have shaped my ideas about linguistics.

Very many thanks are due to Rebecca Defina for friendship and support. Doing fieldwork together with you has been a great experience! Thank you too for the many helpful comments on earlier versions of this thesis.

Finally I would like to thank my parents and other family and friends for being there for me and giving me the energy that I needed to write this thesis.

## 1. Introduction

### 1.1 Theoretical background

### 1.1.1 Talmy's typology

How motion is expressed in language is a question that has received much attention ever since Talmy $(1985,2000)$ developed his now famous lexicalisation typology. This typology is based on how the semantic notions manner of motion and path of motion are expressed in languages. There are two types of languages in this respect. One type expresses manner of motion in the main verb of a construction and path of motion in a so-called satellite. A satellite according to Talmy (2000: 102) is "the grammatical category of any constituent other than a noun-phrase or prepositional-phrase complement that is in a sister relation to the verb root. It relates to the verb root as a dependent to a head." This category includes among others English particles like out, over and across and Slavic verb prefixes. Languages that use a satellite to express path of motion are called satellite-framed languages (Slanguages) and examples can be seen in (1). The other type of language expresses path of motion in the main verb and manner of motion in an adjunct, usually containing a non-finite manner verb. These languages are called verb-framed languages (V-languages) and some examples are shown in (2).
(1) Satellite-framed (manner in main verb, path in satellite):
a. English

He ran into the house.
b. Serbo-Croatian

| Čovek | je | išepao | iz bašte |
| :--- | :--- | :--- | :--- |
| man | be-COP | out-limp-PST-PFV-3SG-M | out of garden |
| 'The man limped out of the garden.' | (Filipović, 2007: 43) |  |  |

(2) Verb-framed (path in main verb, manner in subordinate constituent):
a. French

Il est entré dans la maison en courant.
he is entered in the house at running
'He ran into the house.' / 'He entered the house running.'
b. Hausa
yaaròo yaa shìga daakì dà $\quad$ gudùu
boy he entered room with running he rem running.'
(Schaefer and Gaines, 1997: 203)

The notions manner and path may need some further explanation. Manner of motion indicates the way in which the moving figure moves. It is a difficult notion to define more precisely, but at the same time it is quite intuitive. Manner expressions can say something about the
speed of movement, the vehicle used to move, the specific movement of the limbs of the moving figure etc. Some examples of English manner of motion verbs are run, walk, crawl, drive, roll, leap, hop, tiptoe, stagger, stumble, trudge and hike. Path of motion is the route travelled by the moving figure with respect to a ground. A ground description can include a number of components. It can include source of motion, which is the departure place of the figure. It can include goal of motion, which is the destination of the figure. It can also include several landmarks (also called milestones), which are entities seen as wholes with respect to which the figure moves. Finally it can include a medium which is a location or substance that the figure moves within. The path itself can also consist of various elements such as leaving, passing, crossing, circling etc. To make this more concrete, consider example (3). In this example, the manner of motion is walking. All possible ground elements are expressed: a source (the station), two mediums (the avenue and the crowds), a landmark (the monument) and a goal (his office). The indicators of path are from, along, through, past and to. Path elements do not always co-occur with ground expressions. In (4) the path expression down is not accompanied by a ground expression.

He walked from the station, along the avenue and through the crowds, past the monument, to his office. (adapted from Slobin 1997a: 439)
they decided to walk outside the house down to the back of the garden...
(Slobin 2004: 239)

The notion satellite may also need some explanation. In fact, Talmy's definition of satellite as quoted above turns out to be imprecise and not very explanatory. Beavers, Levin and Tham (2008) show that not everything that Talmy calls satellite is in a sister-relation to the verb. It also seems difficult to maintain a distinction between satellites and prepositions, as prepositional phrases can express path as well as (other) satellites. Beavers, Levin and Tham propose to call anything a satellite that is a sister to the verb root or adjoined to it. I will use their wider definition in this thesis. Another way of dealing with the problematic notion satellite is provided by Slobin (2008). He emphasizes that the important difference between V -languages and S -languages is not whether path is expressed in a satellite but whether it is expressed in a verb or not. He then proposes to rename the two categories to Path In Verb (PIV, previously verb-framed) and Path In Non-Verb (PIN, previously satellite-framed). These names indeed reflect the important aspects of the lexicalization types better than the traditional names, but as the traditional names are better known, I will continue to use these. I will use them merely as labels though, without implying that satellite is an important or welldefined notion.

### 1.1.2 Typology and narration style

Slobin shows in a series of articles $(1996,1997$ a, 2004) that the place of a language in Talmy's typology has consequences for other domains of the language. He compares the way motion is described in narratives in the two types of languages and concludes that their
different lexicalization patterns have resulted in different narration styles. The main differences are that manner of motion is more salient in S-languages than in V-languages and S-languages tend to elaborate more on the description of the path.

The saliency of manner in S-languages is reflected in a frequent use of manner descriptions in texts and in a more richer inventory of manner verbs. The manner-verb lexicon of Slanguages, as opposed to that of V-languages, includes many expressive and semantically detailed verbs. According to Slobin, the saliency of manner is related to the ease with which manner and path can be combined. In S-languages, combining manner and path is easy, as path satellites do not occupy the main verb position, leaving this open for a manner verb. In V-languages, path has to be expressed in the main verb. Manner can be added, but this makes the construction more complex. Therefore, speakers of V-languages often express path alone and leave out manner. In these languages, manner of motion is only expressed when it is special and should be emphasized, whereas in S-languages manner is often expressed when it is not important at all.

The greater elaboration of path in S-languages is related to the ease with which several path expressions can be combined. Combining path expressions is easy in S-languages, as several path satellites can be combined in one clause. In V-languages every path element needs a separate verb and every verb needs a separate clause. Using a lot of clauses slows down the pace of a narration and is thus avoided.

It will be clear now that V -languages tend to avoid both manner descriptions and elaborate path descriptions, which means they generally use less motion descriptions in narrations. Instead, speakers of V-languages use more static scene descriptions, out of which path and manner information can be inferred.

### 1.1.3 Other influencing factors

Slobin (2004: 219-220) states that "language use is determined by more than lexicalization patterns. (...) a fuller account of narrative organization will require attention to a range of morphosyntactic, psycholinguistic, and pragmatic factors." The saliency of manner for instance, is influenced not only by lexicalization pattern, but also by morpho-syntactic properties. In Russian, for instance, manner seems to be more salient than in Germanic languages. This is due to the absence of general or deictic verbs to which path-prefixes can be attached. Another influencing factor is the availability and use of alternative manner expressions such as adverbs and ideophones. With regard to the elaboration of path, Slobin (2004) also notes a number of influencing factors. One of these is the availability of locative case marking. Basque is a V-language, but because of its array of locative cases, multiple path elements can be combined as easily in Basque as in S-languages. The opposite case is also attested: there are also languages in which manner and path can be combined easily, but which bar the use of both source and goal in one clause. This is also found by Bohnemeyer et al. (2007), who investigated the number and type of path elements that can be packaged
tightly together in languages. The three different groups of languages found in their typological study cut across the categories verb-framed and satellite-framed.

Slobin (1997a) points out that some V-languages can combine manner and path in one clause, just like S-languages. This can be seen in example (5). This is only possible with paths in which no boundary is crossed. A boundary is a visible or invisible border between one area and another area. Typical boundary-crossing path expressions in English are out of, into and across. Even though constructions like (5) without any such path elements are possible in Vlanguages, they are not used much in narratives. Slobin hypothesizes that this could be due to the relative infrequent occurrence of paths that do not cross a boundary. Because most paths do cross boundaries, V-languages have developed a narrative style that avoids the use of manner-path and path-path combinations, as described in the previous section. Filipović (2007) shows that boundary-crossing can also play a role in S-languages. In S-language Serbo-Croatian, manner verbs cannot be combined with boundary-crossing path prefixes in the imperfective aspect. In these cases, a verb-framed construction needs to be used.

Spanish
los tres hombres caminaron lentamente y sin agitación visible the three men walked slowly and without agitation visible por las calles desde la cárcel hasta el extremo de la marisma through the streets from the jail until the edge of the marsh 'the three men walked slowly and without visible agitation through the streets, from the jail up to the edge of the marsh...'
(Slobin 1997a: 443)

Beavers, Levin and Tham (2008) go one step further than most previous authors and argue that lexicalization pattern is not a single property of a language, but rather the result of a sum of language-particular properties that are not specific for motion. They point out that almost all languages have both verb-framed and satellite-framed constructions. The observation of a split between S-languages and V-languages arises from the fact that one of these types is usually preferred in a given language. Languages prefer less complex structures over more complex ones. Which of the different verb-framed and satellite-framed constructions that a language possesses is least complex, depends on motion-independent, language-specific characteristics.

### 1.1.4 A third category

A problem with Talmy's typology that will play an important role in this thesis, is that there are several types of languages that show a lexicalization pattern different from both verbframed and satellite-framed. These are languages in which manner and path are expressed by elements of equal status in the clause. Slobin (2004) mentions three types of languages in which this is the case. One type are languages with bipartite-verbs in which one part is used to express manner and another to express path, the second are languages with manner and path preverbs that can both be combined with general motion verbs, and finally there are
serializing languages which combine manner verbs and path verbs in serial verb constructions. All these languages do not seem to fit in a two-way typology. Slobin therefore proposes a third type of language which he calls equipollently framed.

Several authors have written in some more detail about serialising languages, which form one type of equipollently framed languages (Ameka and Essegbey, 2001; Zlatev and Yangklang, 2004; Chen and Guo, 2009). These authors all notice that serialising languages behave like S-languages in some respects and like V-languages in other respects. Like Vlanguages, serialising languages have many path verbs which are often used in single verb constructions (6). But manner and path can be combined as easily as in S-languages, by combining a manner verb with a path verb in a serial verb construction (7). When looking at narration style, manner seems to be more salient than in V-languages, although perhaps not as salient as in S-languages, and serialising languages seem to elaborate path of motion as much as S -languages.
(6) Thai
chán khâw hôs刀
I enter room
'I went into the room.'
(Zlatev and Yangklang, 2004: 163)
(7) Ewe

| deví-á | tá | $y i$ | $x 0-a$ | me |
| :--- | :--- | :--- | :--- | :--- |
| child-DEF | crawl | go | room-DEF | containing_region |

'The child crawled into the room.'
(Ameka and Essegbey, 2001: 3)

### 1.2 Research questions

In this thesis I will describe the previously undescribed system of motion expression in Avatime, a language spoken in Ghana. Avatime is a language with serial verb constructions that can be used to express manner and path, similar to the Ewe construction in example (7) of the previous section. This means that it will likely fit in the category of equipollently-framed languages. As this lexicalization type has not been studied extensively, the data described in this thesis will hopefully shed some light on the status of this type of language as compared to satellite-framed languages and verb-framed languages. I will compare the Avatime data to typical satellite-framed patterns and verb-framed patterns and also to the other serialising languages of which the expression of motion has been described before.

The main questions that will guide my research are:

1. How are motion events expressed in Avatime? In answering this question, both what is possible in the language and what is usual in the language will be addressed. A motion event, as I use the term, is an event in which a figure changes location with respect to a ground. Caused motion and stationary motion will not be taken into account. This
question can be divided into four sub-questions: (i) how is path of motion expressed, (ii) how is manner of motion expressed, (iii) how is the combination of manner and path expressed and (iv) how are complex paths expressed.
2. How do the lexicalisation of motion and the use of motion expressions in Avatime fit in the typology of motion lexicalisation? How can the lexicalisation pattern of Avatime be classified? How does the typological category of Avatime correlate with (i) the saliency of motion, (ii) the packaging of multiple path and ground elements and (iii) the elaboration of path in narrations? And finally, what are the similarities and differences between Avatime and other languages with similar lexicalisation patterns?

The rest of this thesis will consist of the following sections. In the remainder of this chapter, Section 1.3, my research methods and the data I collected will be described. Chapter 2 will give an overview of the grammar of Avatime. In Chapter 3, I will come to the expression of motion, with a discussion of Avatime motion verbs. The lexical semantics and use of Avatime motion verbs will be discussed and compared to motion verbs in other languages. In Chapter 4 I will discuss the combination of motion verbs to describe both manner and path or a complex path. The Avatime constructions and their use will be compared to other languages. In Chapter 5, conclusions and questions for further research will be stated.

### 1.3 Data collection

### 1.3.1 Methods of data collection

This thesis is based on data gathered during four months of field research on Avatime in Ghana. Part of this time was devoted to gaining an understanding of the basic grammar of the language, part of it was used to document the language and part of it was used for specific research into the expression of motion. I gathered data by various methods. Firstly, I carried out elicitation sessions in which I either asked for the Avatime equivalent of English sentences or in which I asked for grammaticality judgements of Avatime sentences. Secondly I elicited data by using various elicitation tools developed for research into motion expressions. The following elicitation tools were used:

- 'Come' and 'Go’ Questionnaire (Wilkins and Hill, 1993) This is a questionnaire consisting of 20 schematic motion scenes. The scenes vary in the orientation of motion with respect to the deictic centre, whether and to what the motion is anchored (source, goal) and whether the path is straight or not. The scenes are not meant to be shown to consultants directly; the researcher should find an appropriate way to convey them to the consultant. I elicited the questionnaire from three speakers. With the first consultant I used duplo to enact the motion scenes. With the second and third consultants I explained the scenarios in English, using places in the village as reference points, avoiding the English words come and go myself.
- Slobin Manner Clips (Slobin, 1992). This is a set of video clips which show people moving with different manners of motion. I showed these to three consultants and asked them to describe what happened in the videos. Again, consultants were asked to describe what happened.
- Run Walk Crawl Climb. This is a set of video clips designed by researchers involved in the 'motion encoding in language' project at NTNU. They show moving people and animals. I used these clips in elicitation four times; three times with a single consultant and once with a group of three children.
- Lego Route Description Task (Wilkins, 1993). This elicitation task is carried out by two participants, each of which is sitting in front of a duplo landscape. The participants sit next to each other, but a screen is placed between them so that they cannot see each other's landscapes. The landscapes are identical, except that in one of them a chain is laid out, which symbolises a path through the landscape. The participant sitting in front of the landscape with the chain gives directions to the other person so that $\mathrm{s} / \mathrm{he}$ can follow the route of the chain without seeing it. Both participants follow the route with a duplo doll while talking and they can ask each other questions when directions are not clear. I played this 'lego game' with 4 pairs of participants and went through two or three different routes with each pair. All sessions were audio and video recorded. See appendix B for a transcribed 'lego game'.

As another elicitation method, I used the duplo materials to elicit some self-designed motion scenes, and I enacted some motion scenes myself. The final method of data collection used was recording spontaneous speech. My collegue Rebecca Defina and I recorded several stories, interviews, conversations and cultural events. Some of the stories were retellings of the wordless picture book 'frog where are you' (Mayer 1969). There are also some folk tales, a story of the history of the Avatime people, directions to various places in the area, stories about Avatime customs and traditions and life stories of people. The interviews were mostly about what people did the day before, what they planned to do the next day, what they want to do when they grow up (in the case of children), what they think the village will be like in the future and what the village was like in the past (in the case of older people). One of our consultants recorded some spontaneous conversations that he had with friends and a wake keeping ceremony. Rebecca Defina and I video-recorded the outdooring of the paramount chief, the oath-swearing of the chief of the village Gbadzeme to the paramount chief and the annual yam festival in Amedzofe. All recordings were transcribed and translated with the help of Avatime speakers.

### 1.3.2 References to the data

In this thesis, the source of every Avatime example is indicated between brackets, following the English example translation. Elicitation sessions are indicated by a code consisting of R, S or RS followed by a number. The letter refers to the person who recorded the session, $\mathrm{R}=$ Rebecca Defina, $S=$ Saskia van Putten and $R S=$ both Rebecca Defina and Saskia van Putten. The number refers to the date and number of the recording. The first two numbers represent
the month, the third and fourth number represent the day and the fifth number represents the individual recording. Thus, a recording labelled S11123 was made by Saskia van Putten on the $12^{\text {th }}$ of November and this was the third recording made by her on that day. All recordings were made in the year 2008.

Sometimes, this code is followed by an indication of the specific elicitation tool used. The following abbreviations are used for this:

CG = 'Come' and 'Go' questionnaire
SM = Slobin Manner Clips
RW = Run Walk Crawl Climb video clips
Other sources than elicitation sessions are referred to by names relating to their content. The following is a list of these other sources.
ablabe $=$ a story about practices relating to puberty rites in the past
frog $=$ a story told based on the picture book 'Frog, where are you'.
lego $=$ a lego route description task
dir $=$ a description of the directions to a place specified after 'dir'.
farming $=$ a story about farming practises of the Avatimes
history $=$ a story about the history of the Avatime people
duck $=$ a folk tale about a rabbit and a duck
interview_2 = interview with an old woman
dog $=$ a folk tale about a dog
conv $=$ a natural conversation recorded without the researchers' presence
okro $=$ a description of how to cook okro soup
Ho_trip = a description by a man of his recent trip to the town Ho
SUnrec $=$ a short unrecorded elicitation session about serial verb constructions

The code or name of the recording is followed by the initials of the speakers that appear in the recording. Information about these speakers can be found in the following list.

AD Awua Dadikumah Gladis, 87 year old woman from Amedzofe
DA Charlotte Adzoyo Bakudie ('Da Adzo'), 69 year old woman from Vane
EA Esther Adorbor, girl from Vane
ED Elvis Dzradosi, 12 year old boy from Vane
EF Esenam Adzo Foli, 18 year old girl from Vane
EK Ernest Kwaskpui, 14 year old boy from Vane
FY Walter Ray Ofasi ('Fo Yao'), elderly man from Vane
GE Grete Ebedi, elderly woman from Vane
KA Kennedy Adipa, 14 year old boy from Vane
Ko Korku, 16 year old boy from Vane
MA Manfred Apati, elderly man from Fume

MM Mathias Mahunu, 19 year old boy from Vane
PA Peace Akoto, 70 year old woman from Amedzofe
RE Richard Edzeani, 18 year old boy from Vane
SN Susan Nugble, 13 year old girl from Vane
SO Sammy Kwami Oboni, 31 year old man from Vane
YD Yawa Datsa Elizabeth, 86 year old woman from Amedzofe
VA Vida Adobo, 33 year old woman from Vane

The corpus of motion expressions from stories, conversations and route descriptions that I refer to on several occasions in this thesis consists of all motion expressions obtained from 4 lego route description sessions, 15 narrations, 7 route descriptions to places in the Avatime area, 2 interviews and a conversation. In addition, motion expressions from 23 elicitation sessions were used.

All recordings are stored in the Endangered Languages Archive (ELAR) of the Hans Rausing Endangered Languages Project at SOAS in London.

## 2. Grammar sketch

## 2.1 introduction to the language

Avatime is one of a group of languages called Togo Remnant, Central Togo or most recently Ghana-Togo Mountain (GTM). This group consists of 14 languages spoken in Ghana, Togo and Benin and has mostly been classified as Kwa - Niger-Congo. Heine (1968) provides a detailed subclassification of the GTM languages. The main division he proposes is one of Nalanguages versus Ka-languages. Avatime belongs to the Ka-branch. Several researchers have since suggested that the Na and Ka groups do not derive from a common ancestor. Williamson and Blench (2000) classify both groups as direct branches from Proto-Kwa. Blench (2006) suggests that the GTM languages form a typological group, but not a genetic group, and even the Ka and Na branches should not be treated as genetic groups. He suggests that there are four genetic clusters of GTM languages, but how these are related to each other and to established language families is not evident. Kropp Dakubu (2008) argues that GTM languages do form a genetic group, consisting of the subgroups Ka and Na, as Heine originally proposed. In her classification, the GTM languages are most closely related to the Tano languages (which include Bia, Akan and Guang). Whatever turns out to be the best classification for GTM languages, it is clear that Avatime is most closely related to its neighbouring languages Tafi and Nyangbo, as this is recognized by all previous researchers.

Avatime is spoken in eight villages in the Volta Region of Ghana: Vane, Amedzofe, Gbadzeme, Biakpa, Dzogbefeme, Fume, New Dzokpe and Old Dzokpe. There are many dialectal differences between the villages, but my colleague Rebecca Defina and I have not been able to study these in detail. We stayed in the village Vane during our field trip and that is where most of the data used for this thesis comes from. Vane is also the village in which the paramount chief resides. All previous research into the Avatime language has been carried out in the village Amedzofe. The locations of the villages with respect to eachother and the location of the Avatime area in Ghana can be seen on the map on page 6.

Ethnologue mentions 24.000 speakers of the language (Gordon 2005, based on a 2003 census). Adjei (2005) estimates a number of 7.000 , based on a 2000 census. The true number of speakers probably lies somewhere between these two figures. The Avatime language is bordered to the west by Tafi and Nyangbo, to the north by Logba and to the east and south by Ewe. Ewe is the dominant language in the region and almost all Avatimes speak it as a second language. It is used at school, in church and to a certain extent on the local market. It is also a necessary language for getting around in the closest city, the regional capital Ho. Many Avatime speakers also speak English. English is the national language of Ghana and is used as the medium of instruction in the later years of primary school and in secondary schools.

Avatime is the Ewe name for the language and for the area where the Avatime speakers live. The Avatimes themselves refer to their language as $\operatorname{Siya}(S \varepsilon)$ or $\operatorname{Sidzme}(S \varepsilon)$. In these two words, $-s \varepsilon$ is the definite suffix and the prefix $s i$ - is the noun class prefix of class 7 , which
contains all names for languages. The root ya in Siyase means 'language', so in fact this word can be used to denote any language. The root deme in Sidzmese is related to the word Kedame which refers to the Avatime area. Because of this, some speakers maintain that $\operatorname{Sid\varepsilon m\varepsilon }(S \varepsilon)$ is the proper word to refer to their language. However, there are other speakers who do not know this word or never use it. Because of these differences and because Avatime is the name by which the language is known in previous linguistic and anthropological literature, we have decided to use the name Avatime in our work.

Avatime is not a written language. As the phoneme inventories of Avatime and Ewe are very similar, Rebecca Defina and I decided to use the Ewe orthography, which is familiar to many Avatime speakers, to represent the sounds of Avatime. The only sounds for which there are no obvious symbols are the -ATR high vowels (see Section 2.2), which are absent from Ewe. We decided to represent these sounds using the normal symbols for high vowels combined with a diacritic underneath to indicate -ATR quality. Currently, an orthography of Avatime is being developed by the Ghanaian Institute of Linguistics, Literacy and Bible Translation (GILLBT). As this orthography is also based on Ewe, it will likely be very similar to ours and thus our texts should be easy to read for Avatime speakers used to the GILLBT orthography. Tones (see Section 2.3) are fully marked on some examples and partially or not marked on others. This is because we have not had time to transcribe all the tones on all Avatime texts. Whenever the text that an example is taken from is tone-marked, tones are also marked in the example. In examples from texts that are not tone-marked, I will indicate only the most important tones.

### 2.2 Phonology

Several other authors have written about the phonology of Avatime (Funke, 1909; Ford, 1971; Schuh, 1995a; Maddieson 1998). This has greatly facilitated our research into the phonology, as it meant that our main job was to check our data against previous findings and analyses. In this section I will give an overview of the most important features of the phonology of Avatime, and I will discuss some differences between our findings and those described by previous researchers. For more extensive studies on topics in Avatime phonology, the reader is referred to the works mentioned above.

### 2.2.1 Consonants

Table 2.1 shows the consonants of the Avatime language. The consonants between brackets occur only in loanwords from Ewe origin. These are the voiceless bilabial fricative $f$ and the voiced apical postalveolar stop $d$. Where the orthographical symbols differ from the IPA convention, IPA symbols are given between square brackets.

Table 2.1: Consonant chart

|  | bilabial | labiodental | alveolar | palatal | velar | labial-velar |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| stop vl | p |  | t |  | k | kp |
| stop vd | b |  | $\mathrm{d}(\mathrm{d})$ |  | g | gb |
| fricative vl | $(\mathrm{f}[\phi])$ | f | s |  | x | $\mathrm{xw}\left[\mathrm{x}^{\mathrm{w}}\right]$ |
| fricative vd | $\mathrm{v}[\beta]$ | v | z |  | $\mathrm{h}[\mathrm{\gamma}]$ | $\mathrm{hw}\left[\mathrm{y}^{\mathrm{w}}\right]$ |
| affricate vl |  |  | ts | tsy $[\mathrm{t}]]$ |  |  |
| affricate vd |  |  | dz | dzy $[\mathrm{m}]$ |  |  |
| nasal | m |  | n | ny $[\mathrm{n}]$ | y | $\mathrm{yw}\left[\mathrm{y}^{\mathrm{w}}\right]$ |
| oral sonorant | w |  | $1 / \mathrm{r}$ | $\mathrm{y}[\mathrm{j}]$ |  |  |

There has been disagreement in the literature as to whether there is a distinction between alveolar and palatal affricates. Both Funke (1909) and Heine (1968) claim that there is a distinction between alveolar affricates and palatal stops. Ford (1971a) and Kropp Dakubu \& Ford (1989) claim that there is a distinction between alveolar and palatal affricates. Schuh (1995a) however, did not manage to find any such difference on the phonemic level. He found that the use of either set of sounds varied from speaker to speaker, possibly according to generation. Rebecca Defina and I found that there is a phonemic difference, but this is disappearing from the language. Older speakers make a clear difference between the two sets of sounds and are consistent in which sound is used for which word. Younger speakers tend to pronounce all affricates with a palatal place of articulation.

Ford (1971) claims that the Avatime language has labial-velar fricatives, thus $x \phi$ and $\gamma \beta$. However, Maddieson (1998) convincingly shows that phonetically these sounds are labialised velars rather than doubly articulated fricatives. On the phonemic level they can be considered members of the labial-velar class of sounds, together with the labialised velar nasal. This is an attractive way to analyse these sounds, as they only labialised sounds in Avatime have a velar place of articulation.

The alveolar sonorants $l$ and $r$ are in complementary distribution. $r$ occurs only as the second consonant in consonant clusters that start with an alveolar or palatal consonant. $l$ is used in consonant clusters with initial labials, velars and labial-velars and as single-consonant onset. Exceptions to this generalization occur in loan words and ideophones.

### 2.2.2 Vowels and vowel harmony

Table 2.2 lists the vowel inventory of Avatime. As the table shows, the Avatime vowel system, like that of many African languages, makes a difference between vowels with advanced tongue root (+ATR) and retracted tongue root (-ATR). We use the symbols normally used for open-mid vowels ( $\varepsilon$ and $\jmath$ ) to represent -ATR mid vowels, as is common practice. For the -ATR high vowels, we use the symbols $\dot{l}$ and $\varphi$.

Table 2.2: Vowel chart

|  | front |  | central | back |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | + ATR | - ATR | $(-$ ATR $)$ | + ATR | - ATR |
| high | i | ị |  | u | ụ |
| mid | e | $\varepsilon$ |  | o | 0 |
| low |  |  | a |  |  |

The 9-vowel system of Avatime has not been recognized by all previous researchers. Funke (1909) reports that there are 9 vowels in the language, but decides not to use separate symbols for the +ATR and -ATR high vowels. In the wordlists collected by Stewart (unpublished) and Kropp (1967) only 7 vowels are written. Both authors did not distinguish a set of high ATR vowels. Ford (1971) posits an underlying system of 10 vowels, but argues that on the surface this is reduced to a 7 -vowel-system, again without high -ATR vowels. Both Schuh (1995a) and Maddieson (1998) claim that Avatime has a 9-vowel system. They notice a difference between + and - ATR high vowels. We also heard a difference between these two sets of vowels, although this difference seems to be disappearing. The -ATR high vowels are often pronounced identical to the +ATR high vowels, especially by younger speakers. There are not many minimal pairs of words with high vowels solely distinguished by ATR quality, but they do exist. An example of a minimal pair is kīkù 'yam' versus kịkụ̀ 'item made of rubber or plastic'.

The ATR oppositions form the basis for a vowel harmony system. Prefixes and suffixes take on the ATR value of the closest root vowel (see (1), (2) and (3) below). There are 5 vowel harmony pairs: $i / i, u / u, e / \varepsilon, o / \rho$ and $e / a{ }^{1}{ }^{1}$ This latter pair is somewhat dysfunctional as compared to the other harmony pairs, as it only occurs in person and noun class prefixes. In all other prefixes and suffixes that contain the vowel $a$, it does not harmonize with the root (see (1) and (4)). All roots with a trigger -ATR harmony (2).
a. o-le-lo

C2S-crocodile-DEF
'the crocodile'
b. me-se

1S-run
'I ran'
b. li-gbo-le

C3S-chair-DEF
'the chair'
b. $\quad s-l \varepsilon-l o$

C2S-lizard-DEF 'the lizard'

[^0]```
be-bi-a
C1P-child-DEF
'the children'
```

Most Avatime vowels can be nasalised, but nasalisation is only pronounced word-finally and it is often not pronounced at all. Schuh (1995a) looked at nasalisation as transcribed by Funke (1910) in his wordlist and notes that Funke found nasalised counterparts of all oral vowels except $o$. Schuh himself found only three words in the nominal domain with unconditioned nasalisation, and a few verbs. He concludes that distinctive vowel nasalisation has nearly disappeared from the language. We found clear nasalisation on the four vowels a (e.g. liklã 'stone'), $\varepsilon$ (e.g. $s \tilde{\varepsilon}$ 'to leave'), $!$ (e.g. tsyị 'to tear') and $\varsigma$ (e.g. $\neg g \tilde{\partial}$ 'coconut'). The vowel $\varphi$ in the word $s u \varphi$ 'side' could also be nasalised, we are not sure about this. As a nasalised vowel in the root conditions a nasal consonant in the definite suffix in some noun classes, we have been able to find evidence for nasalisation of the vowels $e$ (e.g. itsre-ne 'okra') and $u$ (e.g. livu-ne 'nest'). However, we have not heard these vowels pronounced nasalised so the suffix could very well be frozen in its nasal form while nasalisation has disappeared. We did not find any nasalized $i$ or $o$. As nasalization does not seem to play an important role in Avatime, I have decided not to indicate it in the orthography used for this thesis.

### 2.2.3 Tone

Avatime has three contrastive level tones: High ( ${ }^{\prime}$ ), Mid ( ${ }^{-}$) and Low ( ${ }^{`}$ ). Low and mid tones are most frequent and can occur on roots of all word classes and on prefixes and suffixes. The high tone has a limited distribution. It cannot occur on non-borrowed noun roots. It does occur on some verb roots but much less frequently than mid and low tones do. It also occurs on noun class prefixes but again less frequently than mid and low tones do. It occurs on some verbal prefixes as well, such as subject agreement prefixes in the habitual and the marker tá- 'intentive', and it is used to indicate negation. The only contour tone in Avatime is a rising tone from low to high, which we have only found on the particle $l \check{\varepsilon}^{\text {' and }}$ ' and the habitual, recurrent and directionality prefix $z \check{E}$-.

Tone is used mainly lexically in Avatime. Some (near) minimal pairs can be seen in (5). There are no purely tonal morphemes in Avatime, but as sets of prefixes sometimes overlap there are instances where a grammatical difference is only marked by a tonal difference, as can be seen in (6).
(5) Lexical tone
tsyí 'turn' sì-yà 'language'
tsyī ‘pour' sị-yà 'hair'
tsyị 'tear'
a. lī-tō-lè lī-mū

C3S-mountain-DEF C3S-be.high
'the mountain is high'
b. lītō-lè lí-mū

C3S-mountain-DEF C3S.NEG-be.high
'the mountain is not high'

Ford (1971) describes Avatime with four contrastive level tones, numbered 1-4 from the lowest to the highest tone. He defines the tones by two binary features, high and raised, as can be seen in Table 3. Tones 1 and 3 are the most basic tones and were likely the only two tones in a previous stage of the language. The two 'raised' tones, tones 2 and 4 , are often derived, but as there are also underived instances of these tones they are posited as distinct tone levels. Schuh (1995: 57) confirms Ford's finding of 4 level tones in Avatime, although he does note that "tone 2 occupies a rather marginal position as an underived tone." A comparison between Ford's (1971) and our description of the tone system of Avatime can be seen in Table 2.3.

Table 2.3: Tone system of Avatime

| Numbering Ford <br> $(1971)$ | Features Ford (1971) |  | Our description of the |
| :--- | :--- | :--- | :--- |
|  | high | raised | tone system |
| 4 | + | + | high $\left(^{\prime}\right)$ |
| 3 | + | - | $\operatorname{mid}\left(^{-}\right)$ |
| 2 | - | + | - |
| 1 | - | - | low $\left(^{`}\right)$ |

The most important difference our findings and those of Ford (1971) and Schuh (1995a) is that we could only find three tone levels in Avatime. The tone between low and mid, Ford's tone 2 is absent in our data. We have carefully checked all segments which Ford and Schuh found to bear tone 2 with three speakers of the language, one old man from the village Fume, an old man from Vane and a young man from Vane. We asked these speakers to whistle words both in isolation and in a sentence and tried to get the words both in contexts where the putative tone 2 was adjacent to a low tone and in contexts where it was adjacent to a mid tone. We also asked speakers to compare whistled words to other words of which the tone pattern had either a low or a mid tone in the place of the putative tone 2 and to tell us if these tones were similar or different. Finally, we checked the pitch levels of some of our results digitally with the software Praat, to see if any pitch difference could objectively be found. All of this did not yield a single instance of tone 2 .

What could have caused the difference between our findings and those of Ford (1971) and Schuh (1995a) is not clear to me. As Schuh reports great difficulties with distinguishing tone 2 from tone 3 , and even claims that speakers do not always make a difference, it could be that tone 2 is not phonemic but rather a lowered tone 3 . This does not explain why we did not
notice any such lowered mid tones however. Schuh's difficulties could also indicate that the difference between tone 2 and tone 3 is disappearing from the language, but as two of our consultants who did not use tone 2 are older than Schuh's main consultant, this does not seem a likely explanation. Another possible cause for the different observations is a dialect difference, as Schuh and Ford worked with speakers from Amedzofe. The Vane dialect on which we did most of our research is known for its divergence from the other Avatime dialects, so it is possible that it has a slightly different tone system. On the other hand, our consultant from Fume who participated in the tone investigation did not use tone 2 either and he reports the Fume dialect to be quite similar to the Amedzofe dialect. All in all, it is clear that more research into the tone system is needed.

### 2.2.4 Root and syllable structure

Most Avatime roots are monosyllabic. Noun roots that are not monosyllabic are usually loan words or ideophonic nouns. There is a fair number of disyllabic verb roots, but the second syllables of most of these verbs seem to have been suffixes in an earlier stage of the language.

Root syllables can have the following structures: CV (as in li-to 'mountain' or pa 'eat'), CVV (as in o-moe 'orange' or glée 'fall') and CCV (as in lị-kla 'stone' or pwya 'throw'). The status of CVV syllables is debatable, as there are no CVV nouns with two identical vowels and no CVV verbs with two different vowels. In CVV nouns with two different vowels, the first vowel usually becomes a glide outside of careful speech. The second consonant of CCV syllables can only be an oral sonorant. The syllable structure of affixes is either CV or V.

### 2.2.5 Phonological processes

### 2.2.5.1 Vowel sequences

Schuh (1995a) claims that vowel sequences are not allowed in Avatime and that they must be resolved by insertion of a glottal stop, elision of one vowel, or if the first vowel is a high vowel it may turn into a glide. His generalization seems too strict for the Vane dialect of Avatime. This may be different for the Amedzofe dialect, as we noticed that one of the differences between these two dialects is that most intervocalic $w$ s and $v$ 's have disappeared in Vane, creating vowel sequences which are pronounced as such. But in many other places vowel sequences are indeed avoided, usually by elision of one vowel. The main principles that seem to operate are that $e$ and $\varepsilon$ are elided when followed by $o, s$ or $a$ and that $a$ is elided when followed by $\varepsilon$. This always happens when suffixes or other markers are attached to a word, but also frequently takes place in fast speech between two words. ${ }^{2}$ Examples of elision after suffixation can be seen in (7). Example (8) shows that elision happens when a clause marker is attached and that elision takes place between words in fast speech (between the definite suffix $-l \varepsilon$ and the postposition $a b a$ ). It seems that in many if not all cases of vowel

[^1]elision, the remaining vowel is lengthened, but we have not studied this systematically. We have not studied vowel elision and other processes that occur in vowel sequences in detail, so the generalizations mentioned in this section remain tentative and for a more comprehensive overview (bearing in mind that this concerns a different dialect of Avatime) the reader is referred to Schuh (1995a).
(7) ke-pe-a $\rightarrow$ kepa 'the house' $k u-p e-o \rightarrow$ kupo 'the houses'

```
l\varepsiloň \̄nivv̄\varepsilon ēmū tró lisụ̀kpp̄̄kpōlābè\varepsilon
```



```
and C1S-child-DEF C1S-ascend put.on:LOC C3S-ant.hill-DEF top-CM
'And the boy climbed on top of the ant hill' (frog SN)
```


### 2.2.5.2 Tone raising

The second phonological process that I will discuss in this section is tone raising. This has been discussed extensively by Ford (1971) and most of Ford's findings have been confirmed by our data. Thus, this will mainly be a brief summary of what is also discussed by Ford, and for a full overview the reader is referred to his work. Ford mainly discusses tone raising on verbs (and subject prefixes), but he mentions that the same principles are at work in nouns. We have noticed a few nouns of which tones seem to raise, but have not studied this systematically. Therefore, I will only discuss tone raising on verbs here.

Mid and low tones can be of two types. Some tones always remain the same, these are called stable tones by Ford. Other tones, which Ford calls unstable, raise in certain contexts. When an unstable low tone is followed by a mid or high tone, it is raised to a mid tone. When an unstable mid tone is followed by a mid or high tone, it becomes high. Examples of this can be seen in (9).
(9) a. Unstable low tone followed by low tone:
mā-ŋà blàlī-ē
1S-eat plantain-DEF
'I ate plantain.'
(RS09022 SO)
b. Unstable low tone followed by mid tone:
má-ŋ̄ā kịmịmị̄-è
1S-eat rice-DEF
'I ate rice.'
(RS09022 SO)
c. Unstable mid tone followed by low tone:
kị-tō blàlī-ē
1P-cook plantain-DEF
'We cooked plantain.'
d. Unstable mid tone followed by mid tone:

1P-cook rice-DEF
'We cooked rice.'
(RS09021 SO)

As can be seen in (9), the prefix preceding a raised tone sometimes raises as well. Whether or not this happens depends on the verb. Prefixes on verbs with raised low tones, as in (9)b, always raise. Prefixes on verbs with raised mid tones never raise in our data, as can be seen in (9)d. According to Ford, prefixes on verbs with raised mid tones do raise, depending on the verb. As we did not go through all of Ford's verbs, we cannot disprove this. What we did notice though, is that some of the mid tone verbs that are supposed to condition prefix raising, condition a high tone on their prefixes independent of tone raising behaviour. This can be seen in (10) where the verb wlō is not followed by a high tone and thus did not undergo toneraising, while still conditioning a prefix with a high tone. Examples like this could of course be frozen remnants of Ford's observation of prefix raising.
(10) mé-wlō òmōnò

1S-bathe today
'I took a bath today.'
(RS09052 SO)

These tone-raising rules only apply in certain aspects and moods. According to Ford (1971: 54) they apply in "all positive tenses except present continuous" and in "no negative tenses except present continuous". The form called present continuous by Ford is what we call progressive. In our data, tone raising happens definitely in the aorist, habitual and potential. It does not happen in the negative aorist and the intentive. What happens in other aspects and moods needs to be investigated in further research. Example (11) below shows that tone raising does not happen in the negative aorist. Interestingly, in this example the only way to tell the difference between positive and negative is by tone raising behaviour, as the raised prefix in the positive aorist is identical to the high tone negative aorist prefix. Example (12) below shows that tone raising happens in the potential mood, but not the intentive mood.
a. sī-klāmī-s̀̀ sí-lālā

C7-sand-DEF C7-spread
'The sand spread.'
b. sī-klāmī-s̀̀ sí-làlā

C7-sand-DEF C7.NEG-spread
'The sand didn't spread.'
(RS09171 SO)
a. kī-kù-yè kiá-p $\bar{\varepsilon}$ kīvò

C4S-yam-DEF C4S.POT-be.good tomorrow
'The yam will be good tomorrow.'

$$
\begin{array}{llll}
\text { b. } & k i ̄-\text {-kù-yè } & k i ̄-t a ́-p \grave{\varepsilon} & \text { kīvò } \\
& \text { C4S-yam-DEF } & \text { C4S-INT-be.good } & \text { tomorrow } \\
& \text { 'The yam will be good tomorrow.' } &
\end{array}
$$

### 2.3 Morphology

### 2.3.1 Noun classes

One of the features of the Ghana-Togo mountain languages that has interested many researchers is that these languages have noun-class systems, whereas the surrounding Kwa languages do not. Therefore, the noun class system of Avatime has attracted quite some attention and has been described by Funke (1909), Ford (1971) and Schuh (1995b). Schuh offers the most detailed description of the noun class system and the availability of his work has helped us much in describing the system as we found it in Vane, an overview of which will be presented here.

Table 2.4. Noun classes

| noun class | prefix | suffix | demonstrative | some | numeral / how many |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1. sg | O- / Ø | -(y)E | liye / $1 \varepsilon-10$ | 0-to | to-le 'one' |
| 1. pl | bA- / Ø | - | ba-ya / ba-lo | a-to | tịa-sع 'how many' |
| 2. sg | Ò- | - $\mathrm{LO}^{3}$ | lo-ya / lo-lo | 0-to | to-le 'one' |
| 2. pl | (1)İ- | -LE | le- | $\varepsilon$-to | ti-se 'how many' |
| 3. sg | II- | -LE | le- | $\varepsilon$-to | ti-le 'one' |
| 3. pl | A- | -La | la- | a-to | ta-se 'how many' |
| 4. sg | kI- | -(y)E | ke- | $\varepsilon$-to | ti-le 'one' |
| 4. pl | bI- | -E | be- | $\varepsilon$-to | tu-ba 'two' |
| 5. sg | kU- | -O | ko- | -to | tu-le 'one' |
| 5. pl | bÀ- | -a | ba- | a-to | tịa-sع 'how many' |
| 6. sg | kA- | -a | ka- | a-to | ti-le 'one' |
| 6. pl | kU̇- | -O | ko- | -to | tu-ba 'two' |
| 7 | sI- | -sE | sع- | $\varepsilon$-to | to-se 'how many' |

In Table 2.4, the noun class system of Avatime can be observed. Avatime has 7 noun classes, consisting of 6 singular/plural pairs and one class without a singular/plural distinction. Every noun in Avatime has a noun class prefix, with the exception of a number of loan words. The noun prefixes can be seen in the second column of Table 2.4. Class one includes a number of loan words that do not have a prefix, because of this an alternative zero-option is included in the table. The prefix of class 2 plural is I- in Vane but II- in some other dialects of Avatime. Some prefixes have identical segments, such as those of class 1 singular and class 2 singular, or those of class 5 singular and class 6 plural. When there is such an identical-looking pair,

[^2]one of the two prefixes always bears a low tone, while the tone on the other prefix can be mid or high. For example, the tone on the class 2 singular prefix is always low, as can be seen in the word $\grave{o}$-sé 'tree' whereas the tone on the class 1 singular prefix can be mid, as in $\bar{\sigma}$ - gà 'animal" or high as in ó-nyīmé 'man'. The noun class prefixes that can only bear a low tone are marked with a low tone in the second column of Table 2.4. The tones of all other noun prefixes can vary and are determined by the noun.

There are four types of modifiers that show agreement in noun class and number with the head noun. Firstly, there are definite suffixes, which can be seen in the third column of Table 2.4. They often occur on nouns in isolation. When a noun is modified by adjectives or numerals the definite marker is suffixed to the rightmost adjective or numeral. The tone of the definite suffix is low when the tone of the previous syllable is mid or high, as in $l \bar{l}-g b \bar{a}-l \grave{\varepsilon}$ 'the building' and its tone is mid when the tone of the previous syllable is low, as in $\grave{\jmath}$-wlà- $l \bar{\jmath}$ 'the arm'. The second type of modifier that agrees with the head noun is the demonstrative. As the fourth column of Table 2.4 shows, demonstratives usually consist of the root ya 'this' or $l 0$ 'that'. To these roots, a prefix is attached which is either identical to the definite suffix or, if the definite suffix does not have an onset, it consists of the definite suffix combined with the vowel of the noun prefix. When combined with a class 1 singular noun, the form of the word for 'this' is an irregular liye. The prefixes on demonstratives always bear a high tone.
Demonstratives condition a high tone on the final syllable of the preceding word. Examples of the use of demonstratives can be seen in (13) and (14). The third type of modifier that agrees with the head noun is the indefinite marker $t$, as the fifth column of Table 2.4 shows. The prefix on this modifier is always a vowel. When the noun class prefix contains a back vowel, it is $\rho$-, when the noun class prefix contains A , it is $a$ - and when the noun class prefix contains a front vowel, it is $\varepsilon$-. The tone on this prefix is identical to the tone on the noun class prefix. An example of the indefinite marker can be seen in (15). Finally, numerals and the word for 'how many' agree with the head noun. These always have a prefix that consists of a syllable with initial consonant $t$. The vowel of this prefix changes depending on the noun class, as can be seen in the sixth column of Table 4. An example can be seen in (14). Example (14) also shows that adjectives do not show agreement with the head noun.
(13) ò-gbé 10 -yà è-dzè

C2S-rope C2S-this C2S-be.long
'this rope is long'
(S10271 SO)

| ce-gùmè | bìdī | tā-bá | lá-yà |
| :--- | :--- | :--- | :--- |
| C3P-cow | big | C3P-two | C3P-this |

'these two big cows'
(RS09191 SO)

| kị-bo | $\varepsilon$ ¢-¢ $\dagger \bar{\square}$ | kị-lị | mā-wlà |
| :---: | :---: | :---: | :---: |
| C4S-money | C4S-IND | C4S-be.at:LOC | 1S-hand |
| 'I have some | money.' |  |  |

(S10271 SO)

### 2.3.2 Verbs

### 2.3.2.1 Subject agreement and aspect/mood marking

Defina (2009) describes the system of aspect and mood marking in Avatime. I will give a brief overview here, mainly based on her findings. For a more detailed discussion, the reader is referred to her work. Example (16) shows the ordering of prefixes and suffixes on the verb.
(16) Subject Agreement - (Negative) - Aspect/Mood 1 - (Aspect/Mood 2) -
(Aspect/Mood 3) - (Directional)/(Prohibitive) - Root - (Comitative)

The subject agreement prefix is chosen from one of three sets. Which set is used depends on the aspect, mood and polarity category and on the type of verb. An overview of subject prefixes can be seen in Table 2.5.

Table 2.5: Subject agreement (Based on Defina, 2009: 11)

|  | Set 1 aorist (most verbs) | Set 2 negation, subjunctive, aorist (some state verbs) | Set 3 <br> habitual, subjunctive |
| :---: | :---: | :---: | :---: |
| $1^{\text {st }}$ person sg | mA- | mO- | mI- |
| $1{ }^{\text {st }}$ person pl | kI- | kU- | kI- |
| $2^{\text {nd }}$ person sg | wO- | wO- | wU- |
| $2^{\text {nd }}$ person pl | mlE - | mla- | mlI- |
| Class 1 sg | A- | O- | I- |
| Class 1 pl | bE- | ba- | bI- |
| Class 2 sg | È- | O- | I- |
| Class 2 pl | Ì- | I- | I- |
| Class 3 sg | II- | II- | 1I- |
| Class 3 pl | E- | A- | I- |
| Class 4 sg | kI- | kI- | kI- |
| Class 4 pl | bI- | bI- | bI- |
| Class 5 sg | kE- | kU- | kI- |
| Class 5 pl | bE- | ba- | bI- |
| Class 6 sg | kE- | ka- | kI- |
| Class 6 pl | kI- | kU- | kI- |
| Class 7 | sI- | sI- | sI- |

The tone of the set 1 subject markers depends the tone of the prefix of the noun they agree with or in the case of person marking it depends on number. It also depends on the tone of the following syllable. When the tone on the following syllable is mid or high, the subject prefix can have a low or mid tone, as (17) and (18) below show. Low tone subject prefixes are those of the first and second person singular and those which refer to a noun with a low-toned noun class prefix. The other subject prefixes are mid. When the following tone is low, all subject
prefixes have a mid tone（except if there is tone raising as described in Section 2．2．5．2），as can be seen in（19）．
（17）mà－tō blàlī－ē
1S－cook plantain－DEF
＇We cooked plantain．＇
（RS09022 SO）
（18）kị̄－t̄ blàlī－ē
1P－cook plantain－DEF
＇We cooked plantain．＇
（RS09022 SO）
（19）mā－yà blàlī－ē
1S－eat plantain－DEF
＇I ate plantain．＇
（RS09022 SO）

Table 2．6．Aspect and mood marking（Based on Defina 2009：12）．

| Aspect／Mood |  | Subject | Aspect／Mood | Position on the Verb |
| :---: | :---: | :---: | :---: | :---: |
| Basic <br> Aspects | Aorist | Set 1 （Set 2 for copula and positional verbs） | None | Aspect／Mood 1 |
|  | Progressive | Set 1 （fused with aspect marker） | と̌－（lí－in the negative） |  |
|  | Habitual | Set 3 | zと̌－（ ${ }^{2}$－in the negative） |  |
| Basic Moods | Potential | Set 1 （fused with mood marker） | â－ |  |
|  | Subjunctive | Set 2 or 3 | None |  |
|  | Imperative | None | None |  |
| Negative <br> Markers | Negative | Set 2 | － | Negative |
|  | Prohibitive（verb must also be marked for subjunctive） | Depends on basic aspect／mood marking | kú－ | Prohibitive |
| Optional <br> Aspects and <br> Moods | Prospective |  | hà－ | Aspect／Mood 2 or 3 |
|  | Intentive |  | tá－ | Aspect／Mood 2 |
|  | Recurrent |  | zと̌－ | Aspect／Mood 3 |

Table 2.6 shows an overview of the marking of aspect，mood and negation．A verb always has to be marked for one of the basic aspects or moods．In addition，it can be marked for on of the optional aspects and moods．In the progressive and potential，the subject prefixes and aspect／mood markers are fused．The marking of negation differs across aspects and moods．

Except in the habitual, it always involves a high tone on the subject prefix. In addition, the progressive marker $\check{\varepsilon}$ is replaced by lí and the habitual marker $z \check{\varepsilon}$ is removed, leaving only a rising tone. To negate the subjunctive and the imperative, the prohibitive marker kú-must be used. Verbs in the potential mood cannot be negated.

Examples to illustrate some of this can be seen below. Examples (20) and (21) show the different progressive markers in the positive and negative. Examples (22) and (24) show the different habitual markers in the positive and negative. Examples (22) and (23) show the difference between the habitual and the recurrent + aorist, which can only be seen in the subject prefix. Example (25) shows the combination of the intentive with the recurrent and also shows an example of the potential mood.
(20) mè -tó kịmịmị- $-\mathbf{\varepsilon}$

1S.PROG-cook rice-DEF
'I am cooking rice'
(RS09051 SO)
$\begin{array}{lc}\text { mó-lí-tà } & \text { kīmmịmī- } \grave{\varepsilon} \\ \text { 1S.NEG-PROG-eat } & \text { rice-DEF }\end{array}$
'I am not eating rice'
(RS09051 SO)

| bi-ze-xwa | $n \varepsilon$ | $s i$ | $\varepsilon v \varepsilon-$-to |
| :--- | :--- | :--- | :--- |
| C1P-HAB-call | C3S | COMP | Ewe-hill |

'It is called Ewe hill'
(history FY)
(23) $l \varepsilon$ ba ni matse-ana be-ze-ŋwa be-de tsa- $\varepsilon$
and C1P and matse-people C1P-REC-weed C5P-road meet-CM
'They and the matse people used to weed their roads together.' (history FY)
$\begin{array}{ll}m \grave{o ́-\eta} \eta \grave{\varepsilon} & k \grave{u}-d \bar{a} \\ \text { 1S.NEG:HAB-drink } & \text { C6P-drink }\end{array}$
'I don't drink alcohol'
(RS09051 SO)

$$
\begin{array}{lcl}
\text { mà-tá-zē-sē } & \text { xé mr. Divine áà-bā }  \tag{25}\\
\text { 1S-INT-REC-run when name } \quad \text { 3S.POT-come } \\
\text { 'I will be running when mr. Divine comes' }
\end{array}
$$

(RS09052 SO)

### 2.3.2.1 Other markers on the verb

Apart from subject and aspect/mood/negation, two other things can be marked on the verb. The first is directionality, which can be marked by the prefix $z \check{E}$ - 'itive' or bá-lbé- 'ventive'. These prefixes behave strangely with respect to vowel harmony. The vowel of the prefix $z \dot{E}$ usually harmonizes with the root, although we have also heard it in its +ATR form in front of -ATR verbs occasionally. Interestingly, preceding subject prefixes always occur in their ATR forms, as can be seen in (26). The two forms of the ventive prefix, ba- and be-, do not
alternate based on vowel harmony only, but also based on the aspect/mood category the verb is in (see (27) and (28)). Again, in whichever form the prefix occurs, it always combines with a -ATR subject prefix.
a-zě-ku
C1S-IT-arrive
'S/he has arrived (there).'
(S11172 MM)
(27) a-bé-ku

C1S-VEN-arrive
'S/he has arrived (here).'
(S11172 MM)
(28)

غ̀ $\varepsilon$-bá-ku
C1S.PROG-VEN-arrive
'S/he has been arriving (here).'
(S11172 MM)

The restriction of subject prefixes to -ATR could point to the verbal origin of the directionality prefixes. The verbal origin is quite clear for the bá-/bé- prefix, as bā is the verb 'come'. The bé- variant could be the remnant of a serial verb construction, as vowels intervening between the two verbs and possibly replacing the vowel of the first verb are common in these constructions (see Section 4.1). The itive prefix could have developed in a similar way from the verb $z \bar{a}$ 'pass'. If this is the case, it has grammaticalised further than the ventive prefix in becoming sensitive to vowel harmony, but its origin as $z \bar{a}$ can still be seen in the -ATR subject prefixes it combines with.

There is one verbal suffix in Avatime, which seems to be mostly frozen to specific verb roots. This is the comitative suffix $-n \grave{O} /-n \grave{I}$. The two variants $-n \grave{O}$ and $-n \grave{I}$ seem to be in free variation, although some verbs might be restricted to the -nÌ variant. This suffix is not used productively by most people, but there might be some old people in at least one village (Amedzofe) that do use the suffix more or less productively. An example of this can be seen in (29). The consultant who transcribed this story (a man from the village Fume) did not transcribe the combination of wlo + ni, which occurs twice in the story, correctly. This could indicate that he does not use the comitative suffix as productively as the woman telling the story.


Usually, the comitative suffix occurs on a restricted set of verbs, changing the meaning in
 many cases, the original verb root has been lost, as in klàǹ̀ 'move around' and pānì 'speak'.

### 2.4 Syntax

### 2.4.1 word order

The basic word order in Avatime is SVO. Possession is indicated by juxtaposition in which the possessor precedes the possessum (30). Avatime has two prepositions: (a)ni 'and/with' and $n i ́ w h i c h$ is a general locative marker. It also has three or four postpositions indicating spatial relations. These will be discussed in Section 2.4.3.
(30) ye o-klipo-lo C1S C2S-witness-DEF 'her witness' (ablabe YD_AD)

Within the noun phrase, word order is as follows: possessor - noun - adjectives \& numerals (no ordering between them) - definite / indefinite marker - demonstrative. The indefinite marker cannot co-occur with the demonstrative, but the definite marker can. I do not have many examples of definite markers and demonstratives co-occurring, but one can be seen in (31).
(31) kà-bụlài-á ká-yà

C6S-gecko-DEF C6S-this
'this gecko'
(S10271 SO)
Avatime is a verb serializing language. An example of a serial verb construction can be seen in (32). These constructions will be discussed in more detail in Section 4.1.
ee-se dododo tsa ku-de-o
1S.PROG-run slowly cross C5S-road-DEF
'He is running slowly across the road.'
(S11121_SMC FY)

### 2.4.2 Connecting clauses

Avatime has two complementizers: gì and sì. The particle gì marks relative clauses (36). It seems to have some other uses too, but how these can be described best is unclear to us. The marker sì introduces complement clauses to verbs (34)-(35). There are several other particles that can connect clauses. The particle xé is mostly used to indicate conditional clauses (33). It can also be combined with gì to serve seemingly the same purpose, but further research might reveal differences (34). The markers $l \check{\varepsilon}$ and $k \rho$ also conjoin clauses (33), (34), (36). More research is needed to find out what the exact difference in usage of these conjunctions is. The particle $p \grave{\jmath}$ 'but' can also be used to connect clauses (35).

| xe | ma-tsa | $i$-tsre-ne | pá- $\varepsilon$ | $k o$ | ma-tsa | saprada- $\varepsilon$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :--- |
| when | 1S-cut | 2P-okro-DEF | finish-CM | then 1S-cut | onion-DEF |  |
| ma-ks | $a-k p \varepsilon$ | $i$-tsre-ne | $a b a-\varepsilon$ |  |  |  |

1S-take SVM-put 2P-okro-DEF top-CM
'When I finish chopping the okro, then I chop an onion and put it on top.' (okro DA)

| $x e \quad g i$ | o-noe | ee-be-e | ma-mo | si |
| :---: | :---: | :---: | :---: | :---: |
| when COMP | C2S-soup | C2S.PROG-boil-CM | 1S-see | COMP |
| ee-be-e | ko | ma-kpe $\quad$ mo- $\varepsilon$ |  |  |
| C2S.PROG-boi | -CM then | 1S-put salt-CM |  |  |


| mè-dō | sì | maa-dzì | lì-pādzùwè-lē | pò | mó-dzì | $\ldots$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1S-say | COMP | 1S.POT-return | C3S-Sunday-DEF | but | 1S.NEG-return | $\ldots$ |
| 'I said that I would return on Sunday, put I didn't return...' | (Ho_trip SO) |  |  |  |  |  |


| $1 \varepsilon$ | $k a-d r u i-a$ | te | $k \varepsilon-z \varepsilon-k o$ | $k i-d z y a-\varepsilon$ | $n i ́$ | $o-n i-\varepsilon$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| then | C6S-dog-DEF | $?$ | C6S-IT-take | C4S-meat-DEF LOC | C1S-person-DEF |  |
| $g i$ | $a-z \varepsilon-d a$ | $b i-d z y a-\varepsilon$ | $a v a-\varepsilon$ |  |  |  |
| COMP | C1S-REC-sell | C4P-meat-DEF | top-CM |  |  |  |

'A dog went and took meat from the person who sells meat.' (dog PA)

All these particles have in common that whenever they are used to introduce a clause, a clause marker (CM) is attached to the last word of this clause. The clause marker is a front vowel which harmonizes to the vowel it is attached to both in ATR value and in vowel height. It can be seen in examples (33), (34) and (36).

### 2.4.3 Locative phrases

Locative phrases can be used as adjuncts, indicating the location at which something happens, or as arguments with certain verbs of location, motion and placement. Locative phrases consist of a preposition ní, followed by a noun (phrase) followed a postposition. The preposition níindicates a locative relation, the noun (phrase) indicates a reference object and the postposition indicates the search domain. The search domain is the exact part (inside, upper surface, outer surface etc.) of the reference object where something is located (see Ameka 1995).

The preposition ní is often elided outside careful speech. When this happens, the high tone of $n i ́$ is attached to the previous word, as can be seen in the examples below. Example (37) contains a locative phrase with an overt ní. In (38) the locative marker níis elided, changin the mid tone on the verb tre to a rising tone. In fast speech, the mid tone is often replaced by
the high tone rather than combined with it. I am not sure whether the previous vowel is always lengthened when ní is elided, as in this example.

| $\bar{a}-t r \bar{\varepsilon}$ | $n i ́$ | $k \bar{e}-p e-\bar{a}$ | $m \grave{\varepsilon}$ |
| :--- | :--- | :--- | :--- |
| C1S-go | LOC | C6S-house-DEF | inside | 'He went home.'

$$
\begin{array}{lll}
\bar{a}-\operatorname{tr} \bar{\varepsilon} \bar{\varepsilon} & k \bar{e}-p e-\bar{a} & m \dot{\varepsilon} \\
\text { C1S-go:LOC } & \text { C6S-house-DEF } & \text { inside } \\
\text { 'He went home.' } & \tag{S11171FY}
\end{array}
$$

There are four postpositions in Avatime: mè 'inside', ābà 'on', $\bar{e} s \bar{e}$ 'under' and sụ̆ 'near/next to'. Most of these are derived from nouns. The only postposition which is not obviously derived from a noun is mè 'inside', which is probably borrowed from Ewe. The postpositions $a b a$ and ese have corresponding nouns kaba 'top' and kese 'ground'. The difference between the postpositions and nouns is that the first consonant of the noun class prefix is removed in the postposition and the postposition cannot occur with a definite suffix. The postposition $s \bar{\varphi}$ 'near/next to' derives from the noun $i s u ̣$ 'body'. As a postposition, it occurs without initial $\dot{i}$. Examples of the use of postpositions can be seen in (37)- (39).

$$
\begin{array}{llll}
o \text {-nyime } & \text { s-tiní } & \text { li-klakpo-le } & a b a  \tag{39}\\
\text { C1S-man } & \text { C1S-be.on:LOC } & \text { C3S-ant.hill-DEF top }
\end{array}
$$

'The man was on the ant hill.' (frog SO)

Instead of postpositions, nouns can also be used to indicate search domain. These searchdomain indicating nouns occur in the same slot of the locative phrase as postpositions. Some examples of nouns which can be used in this way are stono 'front', kede 'back', onu 'mouth/opening' and kayawla me 'right'. An example of the use of kede 'back' can be seen in (40). This example also shows that these search-domain indicating nouns differ from postpositions in that they can occur with a definite suffix.

| $x e$ | $g i$ | $m a-d o ́$ | $o-h u-l o$ |
| :--- | :--- | :--- | :--- |
| when COMP | 1S-move.from:LOC | C2S-car-DEF | C6S-de-a |
| mi-tsyi | ple |  |  |
| 1S.SUBJ-turn | descend |  |  |
| 'When I come from behind the car, I should turn downwards.' (lego KA_RE) |  |  |  |

Finally, when the noun (phrase) already indicates a location, for instance if it is a place name, no postposition or other indication of search domain is used, as can be seen in (41).
(41) mà-trē ní Amedzofe

1S-go LOC Amedzofe
'I went to Amedzofe.'
(S11111 FY)

## 3. Motion verbs

In Avatime, verbs are the most important word class for the description of motion events. In this chapter, I will give an overview of the Avatime verbs that are used in the expression of motion events. The goals of this chapter are to describe the semantics and use of the Avatime motion verbs, and to compare the inventory of motion verbs in Avatime with that of other languages.

As in other languages, (Ameka and Essegbey, 2006; Levin and Rappaport Hovav, 1992; Wilkins and Hill, 1995) motion verbs in Avatime do not form a syntactic class. Motion verbs can be transitive or intransitive, they can participate in causative alternation or not and they occur in different kinds of constructions. Therefore, the verbs presented here are not chosen following a syntactic criterion. The criteria used to choose the verbs for this chapter are semantic: the verb should encode self-motion of a figure.

Most of the verbs discussed in this chapter are verbs that, to speak in Talmy's (2000) terms, conflate motion and path. These verbs often occur with ground arguments. Each verb can only take one kind of ground argument, either goal, source, landmark or medium (see Section 1.1.1 for an explanation of these terms). This ground argument is either a noun phrase which functions as the direct object of the verb or a locative phrase. Locative phrases, as we saw in Section 2.4.3, consist of a preposition ní, a noun (phrase) and a postposition or search-domain indicating noun. When the noun (phrase) indicates a location, no postposition is used. The preposition níis often elided in which case it leaves a floating high tone behind which attaches to the previous word.

These path verbs will be dealt with in the first three sections of this chapter. For convenience, they are divided into goal-anchored verbs (Section 3.1), source-anchored verbs (Section 3.2) and path oriented verbs (Section 3.3). This division of the verbs is made based on what ground element (goal, source or landmark/medium) is expressed as an argument of the verb. Section 3.4 of this chapter will describe the verbs that conflate motion and manner, and a few verbs that denote change of orientation. Finally, in Section 3.5 I will place my findings about Avatime motion verbs in a comparative perspective.

## 3.1 goal anchored verbs

Most Avatime path verbs belong to the category of goal anchored verbs. These are all verbs that can take a goal argument, either as complement of the verb or as a prepositional phrase. They will be discussed in four sections. Section 3.1.1 will discuss the deictic verbs $t \bar{\varepsilon} \bar{\varepsilon}^{‘} \mathrm{go}$ ', $d z \bar{\varepsilon}$ 'go', tráà ‘be coming' and $b \bar{a}$ 'come'. Section 3.1 .2 will discuss the verbs $k \bar{u}$ 'arrive' and nà 'reach'. In Section 3.1.3, the verb dzì 'return' will be discussed. The last section, 3.1.4, discusses four verbs which encode several other aspects of motion such as a vertical dimension to the path ( $d \overline{\bar{\rho}}$ 'land'), the information that the goal is not reached (hà 'approach') and characteristics of the goal, more precisely that it is moving (kūni 'follow' and $t i$ 'trace').

### 3.1.1 deictic verbs

Avatime has four deictic motion verbs: $b \bar{a}, \operatorname{tráà}, \operatorname{tr} \bar{\varepsilon}$ and $d z \bar{\varepsilon}$. Three of these are monomorphemic, tráà is a lexicalized serial verb construction tr $\bar{\varepsilon}+b \bar{a}$. Looking at examples (1)-(4), $b \bar{a}$ and tráà seem to signify something like 'come' and $t r \bar{\varepsilon}$ and $d z \bar{\varepsilon}$ signify something like 'go'.
(1)

| $l \check{\varepsilon}$ | $\bar{\sigma}-d z \bar{\varepsilon}$ | $\bar{a}-t r \bar{\varepsilon}$ | $n i ́$ | $k \bar{e}-p e-\bar{a}$ | $m \grave{\varepsilon}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| and | C1S-woman | C1S-go | LOC | C6S-house-DEF | inside |

'And the woman would go to the house.'
(ablabe YD_AD)
(2) a-traa ni etsile junction

C1S-be.coming LOC Etsile junction
'She is coming to Etsile junction.'
(S11141_CG DA)
(3)

| $1 \check{\varepsilon}$ | $b \bar{\varepsilon}-d z \bar{\varepsilon}$ | $l \bar{l}-\eta w \bar{a} f i ̣ ̀-n \bar{\varepsilon}$ | $m \bar{\varepsilon}$ |
| :--- | :--- | :--- | :--- |
| and | C1S-go | C3S-forest-DEF | inside |

'And they went into the forest.'
(frog SN)
(4) a-ba ke-dzi-a me

C1S-come C6S-market-DEF inside
'She came to the market.'
(S11141_CG DA)

When looking at how the goal argument is expressed, a different grouping of verbs emerges. The goal arguments of the verbs $\operatorname{tr} \bar{\varepsilon}$ and tráà are expressed in locative phrases (see (1) and (2)) while the goal arguments of the verbs $d z \bar{\varepsilon}$ and $b \bar{a}$ are expressed in their complements (see (3) and (4)) The verbs $d z \bar{\varepsilon}$ and $b \bar{a}$ also group together with respect to lexical aspect. They belong to the Punctual class (Defina, 2009) which means that they describe events that lack duration. As a consequence of this, they have an iterative interpretation in the progressive aspect, as can be seen in (5) and (6). The verb tre $\bar{\varepsilon}$ belongs to the Action class and has an ongoing interpretation when combined with the progressive marker (7). The verb tráà does not belong to any lexical aspect class and can only occur in the aorist. It always has an ongoing interpretation (as can be seen in (2)). In this way, the verb tráà compensates for the inability of the verb $b \bar{a}$ to describe ongoing motion.

$$
\begin{array}{ll}
\dot{\varepsilon} \varepsilon ́-b \bar{a} & \text { juānò } \\
\text { C1S.PROG-come Vane } \\
\text { 'He has been coming to Vane (regularly).' } \tag{S11111FY}
\end{array}
$$

(6) $\grave{\varepsilon}$ é- $d z \bar{\varepsilon}$ àmèdzòfē

C1S.PROG-go Amedzofe
'He has been going to Amedzofe (regularly).'
(S11111 FY)

C1S-woman C1S.PROG-walk slowly when C1S.PROG-go
'The woman is walking slowly while going.' (S11122_SM DA)
Wilkins and Hill (1995) have shown that 'come' and 'go' verbs differ crosslinguistically in several ways. They developed a questionnaire which can help researchers discover the semantic properties of these verbs. I used this 'Come' and 'Go' questionnaire (Wilkins and Hill, 1993) to investigate the properties of the deictic verbs in Avatime. In the rest of this section I will describe the semantics of the four deictic verbs based on the data I obtained using the questionnaire complemented with data from other elicitation sessions and spontaneous speech.

### 3.1.1.1 The verb $\operatorname{tr} \bar{\varepsilon}$ ' $g o$ '

The verb $\operatorname{tr} \bar{\varepsilon}$ 'go' describes motion away from the deictic centre, either starting at the deictic centre itself or somewhere else. It can be used with or without a goal-denoting locative argument. When it is used without a locative argument, the path it denotes is usually unanchored, as can be seen in (7) above. In scenes of the 'Come' and 'Go' questionnaire with unanchored motion past the deictic centre (rather than directly away from it), the verb tre is also used, as can be seen in (8). In this case it needs to be combined with the verb $z \bar{a}$ 'pass', which indicates the actual movement past the deictic centre, while tr $\bar{\varepsilon}$ refers to final stage of the motion where the figure moves away from the deictic centre. The verb tre can also indicate a path anchored to a source, when somebody simply says $\bar{a} t r \bar{\varepsilon}$ 'he has gone'. This is not a frequently occurring use of tr $\bar{\varepsilon}$ though, as the verb $s \bar{\varepsilon}$ 'leave' is usually used for this purpose. When $\operatorname{tr} \bar{\varepsilon}$ is used with a locative argument, it always refers to a path anchored to a goal, as in (9).

| emo | ko | ki-mo- $\varepsilon$ | gi | a-za | tre |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $?$ | just | 1P-see-C1S | COMP | C1S-pass | go |
| 'We just saw her pass.' |  |  |  |  |  |

(9) $\bar{a}-\operatorname{tr} \bar{\varepsilon} \quad$ ní oholo

C1S-go LOC Ho
'She went to Ho.'

There are some situations in which it is impossible to use trē. The most obvious of these is motion towards the deictic centre in which the deictic centre is the endpoint (10). However, there was disagreement amongst the consultants as to whether tre can be used to describe motion towards the deictic centre with an endpoint at a distance away from it. The verb tr $\bar{\varepsilon}$ can also not be used for movement around the deictic centre or for movement along a completely unanchored path (11). It can be used for a path that is not straight, as long as its general direction is away from the deictic centre.

* ā-tré níyà
C1S-go:LOC here
'he went here'
(S11141_CG DA)


Based on the data discussed above, one could conclude that tre encodes motion away from the deictic centre. However, as Wilkins and Hill (1995) show, the interpretation of motion away from the deictic centre is not always encoded in the lexical semantics of 'go' verbs, but may also arise pragmatically from the opposition of an unmarked 'go' verb with a 'come' verb that is marked for deixis. This could be the case in Avatime as well. As I already noted above, there was disagreement amongst my consultants as to whether the verb tre could be used to describe motion towards the deictic centre with an endpoint at some distance from it. There was no disagreement about the use of the verb $b \bar{a}$ 'come' or tráa 'be coming' in the opposite scenario: these verbs would never be used to describe motion away from the deictic centre at a distance. This points to a more general semantics for tre as compared to the two 'come' verbs. When $\operatorname{tr} \bar{\varepsilon}$ is used with a goal argument, the motion towards a goal often seems to be more salient than the fact that this movement is away from the deictic centre, whereas with $b \bar{a}$ 'come', the direction of the motion towards the deictic centre is always salient. To test whether the verb $\operatorname{tr} \bar{\varepsilon}$ also has a non-deictic use when it is not combined with a goal argument, a scene of the 'Come' and 'Go' questionnaire can be used in which the motion is neither towards nor away from the deictic centre. However, it is very difficult to recreate or describe this situation and be sure that it is interpreted as such, so I did not manage to find out if tr $\bar{\varepsilon}$ would be a natural verb to use in this case. An indication that $t r \bar{\varepsilon}$ is unmarked for deixis is the expression in (12) where the verb tre is used to mean 'travel' without any specific place mentioned. This expression is used to indicate that somebody has been away for a while.
$\bar{a}-t r \bar{\varepsilon} \quad n i ́ ~ k u ̄-d e ̄ ~ m e ̀ ~$
C1S-go LOC C5S-road inside
'He has travelled.'
(S11171 FY)

A final argument for the unmarked status of $t r \bar{\varepsilon} \bar{i}$ is the use of the question 'where are you going'. Wilkins and Hill (1995: 230) note that the Arrernte question 'where are you going' can be used even when the deictic centre is among the possible destinations, whereas 'where are you coming' must mean that the goal is somewhere on the way from source to deictic
centre. This is also true for Avatime. The question nifs wettre 'where are you going' is often asked to people passing by, even if they are (still) on their way to the deictic centre. The question nifs wotraa 'where are you coming to' on the other hand, is more marked. According to one consultant this question is used to express ones surprise that the addressee is coming to the speaker's place, or even to imply that the addressee is not wanted there.

Altogether, $\operatorname{tr} \bar{\varepsilon}$ seems to have a more general meaning than just 'move away from deictic centre'. Following Wilkins and Hill (1995) I suggest here that trēdenotes a general 'move' and gets its 'away from deictic centre' interpretation through an opposition with the more specific verbs $b \bar{a}$ 'come' and tráà 'be coming' which encode movement towards the deictic centre. The existence of these two verbs means that the 'towards deictic centre' meaning is pragmatically blocked for $t r \bar{\varepsilon}$. This explanation accounts for the more unmarked goal indicating function of trés. When no goal of motion is expressed, tr $\bar{\varepsilon}$ does seem to have a more salient 'away from deictic centre' interpretation. This could be due to the existence of another more unmarked verb gà 'move'. The semantics of the 'come' verbs bā and tráà and the general motion verb gà leave tr $\bar{\varepsilon}$ to be interpreted as 'move away from deictic centre' when it is used without a goal argument.

### 3.1.1.2 The verb dz̄ ' $g o$ '

The verb $d z \bar{\varepsilon}$ is sometimes mentioned as an alternative for $t r \bar{\varepsilon}$, but it is much less frequent. In the 'Come' and 'Go' questionnaire $d z \bar{\varepsilon}$ was hardly used at all. It was accepted by my consultants when suggested for the two scenes in which there was movement away from the deictic centre, either to a goal or without a goal. It was used spontaneously only once, also in the description of one of these scenes. It did not come up in any of the other scenes, and I did not test whether it could be used there. Because of this, I cannot be sure that $d z \bar{\varepsilon}$ is a deictic verb. The reason that I list it here, is because I have not seen it used to express motion towards the deictic centre and people translate it as 'go' and say it 'means the same as tré '. Except for the difference in lexical aspect noted above, I have not found any semantic difference between $d z \bar{\varepsilon}$ and $\operatorname{tr} \bar{\varepsilon}$. More research into the use of $d z \bar{\varepsilon}$ is needed to find out if this really is the only difference. One thing that needs to be tested is whether $d z \bar{\varepsilon}$ can be used to describe motion towards the deictic centre, to find out whether it encodes deixis or not.

### 3.1.1.3 The verbs bā and tráà 'come'

The verb $b \bar{a}$ was used in the scenes of the 'Come' and 'Go' questionnaire where motion ends at the deictic centre (13) and where motion ends at a goal in between the source and the deictic centre (14). It could be that $b \bar{a}$ can also be used for motion to a goal close to, but not on the way to the deictic centre (15). However, this finding could also be the result of the expansion of the deictic centre to include the goal of motion.
(13) a-ba svano

C1S-come Vane
'He came to Vane.'
(S11121_CG FY)

```
a-ba dzolo kpuit\varepsilon
C1S-come Dzolo Kpuita
'He came to Dzolo Kpuita.' (Dzolo Kpuita is a village close to Vane)
```

(S11121_CG FY)
a-ga dono ní catholic church a-ba ke-dzi-a me C1S-move take.from LOC catholic church C1S-come C6S-market-DEF inside 'She walked (came) from the catholic church to the market.' (the market is close to the deictic centre, but not on the way from the church to the deictic centre)
(S11141_CG DA)

The verb $b \bar{a}$ cannot be used to describe motion without an endpoint. This is compatible with the punctual nature of $b \bar{a}$ which I pointed out earlier. As punctual events are bounded and motion with an indeterminate final destination is unbounded, $b \bar{a}$ cannot be used to refer to motion with an indeterminate final destination. Instead the verb tráà is used in this case, as can be seen in (16). The verb tráà could be used to describe all the scenes in which bā could be used as well, however always indicating that motion is still in progress and the goal has not been reached yet or is being reached at the time referred to. An example can be seen in (17).
(16) $\bar{a}$-tráà
po ó-ba-kú svano
C1S-be.coming but C1S.NEG-VEN-arrive:LOC Vane
'She is coming, but he has not reached Vane.' (S11121_CG FY)

| ki-mo- | gi | atraa | ke-pe-a | $m \varepsilon-\varepsilon$ |
| :--- | :--- | :--- | :--- | :--- |
| 1P-see-C1S | while | C1S-be.coming:LOC | C6S-house-DEF | inside-CM |
| 'We saw her coming home.' | (S11141_CG DA) |  |  |  |

So both $b \bar{a}$ and tráà encode motion towards the deictic centre. In addition, the verb $b \bar{a}$ requires an endpoint to be reached. Whenever it is used without a complement, an endpoint is presupposed. This endpoint is usually the deictic centre, but it can also be another place understood from context or previous mention. The verb tráà on the other hand requires the motion to be in progress and an endpoint is not needed.

### 3.1.2 Arriving and entering

In this section I will discuss two verbs which are used to express the reaching of a goal. These are $n \bar{a}$ 'reach' and $k \bar{u}$ 'arrive'. The verb $n \bar{a}$ is transitive with a goal as its object. It is usually translated as 'reach', and sometimes as 'arrive'. In my data it is used a lot in giving directions (18) and to indicate that travelling protagonists of a story have moved to a new location (19). The goal has to be expressed; it is not possible to use nā intransitively.

| (18) $x$ e | wo-na | o-to-no | to | to |
| :--- | :--- | :--- | :--- | :--- |
|  | when | 2S-reach | C1S-front-DEF | ATT |

'When you reach the front, stop.'
(lego KA_RE)

| $l \check{\varepsilon}$ | $b \grave{\varepsilon} \varepsilon$ - $-g a ̀$ | $l \check{\varepsilon}$ | $b \bar{\varepsilon}-n \bar{a}$ | $l i ̣-\eta w a ̀ f u ̀-n \bar{\varepsilon}$ | $m \grave{\varepsilon}-\bar{\varepsilon}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| and | C1P.PROG-walk | and | C1P-reach | C3S-forest-DEF | inside-CM |
| 'And they were walking, and they reached a forest.' | (frog SN) |  |  |  |  |

The verb $k \bar{u}$ 'arrive' also denotes reaching a goal. The goal is expressed in a locative phrase (20). It is possible to use the verb without this locative phrase to express something like 'he has arrived', but this does not happen often, and in my data not at all in spontaneous (not translated) speech.

| Wò-kú | àmēkúkúbò- $\bar{\varepsilon}$ | $m \grave{\varepsilon}$ |
| :--- | ---: | :--- |
| 2S-arrive:LOC | cemetary-DEF | inside |
| 'You arrive at the cemetary.' |  |  | (RS09221_dir_cemetary SO)

So far, the verbs $k \bar{u}$ and $n \bar{a}$ seem to be quite similar. However, the difference types of consituent that their goal arguments form (that goal argument of $k \bar{u}$ is expressed in a prepositional phrase and that of $n \bar{a}$ a in noun phrase) indicates a semantic difference. This is that the goal of $k \bar{u}$ has to be an area, whereas the goal of $n \bar{a}$ is better visualized as a point or a line. So, whereas $n \bar{a}$ denotes a boundary-reaching event, $k \bar{u}$ denotes a boundary-crossing event. The difference can be seen in the following examples.

$$
\begin{array}{lcl}
\text { wò-nā } & \text { mángō-e } & \grave{o}-s \bar{e}-l o ̀ ~ \\
\text { 2S-reach } & \text { mango-DEF } & \text { C2S-tree-DEF } \\
\text { 'You reach the mango tree.' } \tag{S11171FY}
\end{array}
$$

$$
\begin{array}{ll}
* \text { wo-k } \bar{u} & o-s e-l o  \tag{22}\\
\text { 2S-arrive } & \text { C2S-tree-DEF }
\end{array}
$$

'You arrive at the mango tree.'

| wo-kú | mango-e | o-se-lo | ese / aba / me |
| :--- | :---: | :---: | :---: |
| 2S-arrive:LOC | mango-DEF | C2S-tree-DEF | under / on / inside |
| 'You arrive under/on/in the mango tree.' | (S11171 FY) |  |  |

A further difference in use between $n \bar{a}$ and $k \bar{u}$, is that nā almost always occurs in single verb constructions. The verb $k \bar{u}$ is not often used in single verb constructions and when it is, it is usually combined with a directional prefix (24). Most occurrences of $k \bar{l}$ are in serial verb constructions, where $k \bar{u}$ is the second verb, serving to indicate the goal of a motion event (25).

| $\bar{\sigma}-n i ̀ v \bar{̄}-\varepsilon$ | $\bar{e}-m \bar{u}$ | $k \bar{u}$ | $n i ́$ | $\grave{o}-$-sē-lō | mè |
| :--- | :--- | :--- | :--- | :--- | :--- |
| C1S-child-DEF | C1S-climb | arrive | LOC | C2S-tree-DEF | inside |
| 'The boy climbed into the tree.' |  |  |  | (frog SN) |  |

Even though kū indicates boundary-crossing and can be translated as 'into' when it is used in serial verb constructions, it is not used on its own to indicate movement into an enclosed area (such as entering a house). Avatime does not have a monomorphemic verb similar to English enter. In fact, Avatime does not have a verb to denote movement into an enclosed area. The verb that is used for this purpose is tiku, a lexicalised serial verb construction consisting of the verbs $t \bar{i}$ and $k \bar{u}$. The verb $t \bar{i}$ indicates moving closer to some place (see Section 3.4.1), but seems to have lost most of its semantics in the combination with k $\bar{u}$. The origin of the combination $t i ̀+k \bar{u}$ as SVC can be seen in the different forms in which it occurs. For many speakers it has changed into a verb tuku (26), but others use teku in the aorist, and tiku in other aspects, still using some of the SVC markers (for more information about SVCs see Section 4.1). These two different forms can be seen in the first and last words of example (27).
be-tuku ní ku-ni-o me
C1P-enter LOC C5S-water-DEF inside
'they entered the water'
(frog SO)


### 3.1.3 The verb dzì 'return’

The verb $d z i$ encodes a return path, which is a path from location A to location B and back to $A$. The verb $d z i ̀$ focuses on the second half of this path, the journey from $B$ to $A$, although a previous journey from A to B is entailed. When $d z i ̀$ is used in a single verb construction, which does not happen often, it is usually translated as 'come' or 'arrive' (28). The verb dzì cannot be used with an object, but whether or not it can be used with a locative argument to express the goal (location A) is not clear. There are two examples of this in my data, both
from the same elicitation session (see (29) for one of these). In a later session the same consultant judges the phrases in (30) as ungrammatical.
(28) $\bar{e}$-dzì

C1S-return
'He has come (back).'
(S11171 FY)

C1S-return:LOC C2S-town-DEF inside from:LOC C3S-bush-DEF inside
'He came into town from the bush.'
(S11111 FY)

| a. | *ē-dzì | ə̀vāǹ̀ |  |
| :--- | :--- | :--- | :--- |
|  | C1S-return | Vane |  |
| b. | ${ }^{*} \bar{e}-d z i ̀$ | $n i ́$ | ̀̀vāǹ̀ |
|  | C1S-return | LOC | Vane |

(S11171 FY)

Even if $d z i$ can take a locative argument it very rarely does. In the great majority of expressions with $d z i ̀$, it is combined with one of the deictic verbs $b \bar{a}$ and $t r \bar{\varepsilon}$ for instance in (31) and (32). These verbs serve to indicate the goal of motion, and its relation to the deictic centre. In these expressions it is still the second half of the path which is referred to. Also when $d z i$ is combined with $d \bar{\jmath}$ 'move from' the second half of the path is described, with attention to location B. This can be seen in (29) above. The only way to explicitly mention the first half of the path, from $A$ to $B$, is to express this in a separate clause, preceding the clause which contains dzì. An example of this can be seen in (33).

| ko | $m l e-d z i$ | $b a$ | $k e-p e-a$ | $m \varepsilon-\varepsilon$ |
| :--- | :--- | :--- | :--- | :--- |
| then | 2P-return | come | C6S-house-DEF | inside-CM |

'After this you would return home.'
(ablabe YD_AD)
(32) bite gwa wee-dzì i tre ku-sa-a gi be-kpe do like 2S.PROG-return SVM go:LOC C5S-cloth-DEF which C1P-put 'Do as if you are returning to the cloth which they put there.' (lego DA_FY_2)
ma-mo- $\quad$ gi $\grave{\varepsilon} \varepsilon$-tre $\quad$ xe èé-dzì í $\quad$ ba-1S-see-C1S while C1S.PROG-go and C1S-return SVM come-CM 'I saw him going and coming back.' (S11121_CG FY)

### 3.1.4 Other goal anchored verbs

Four other goal oriented verbs occur in my data, all of them are quite rare. The most frequent of these is $d \overline{\bar{\jmath}}$ 'land'. This verb denotes motion through the air, the endpoint of which is the upper surface of another entity. This means that it is often the result of a falling event and thus often translated as 'fall on(to)'. In most of the occurrences of $d \overline{\mathrm{y}}$ that I collected, it is either
used with the locative phrase ní kesea 'on the ground' (34) or it is used without a locative phrase and with dzénī ‘rain’ as its subject (35). Example (36) shows that $d \overline{\text { oncan }}$ have a goal other than 'the ground'. It seems likely that $d \overline{5}$ would also be used for flying animals and perhaps also airplanes landing, but unfortunately I do not have examples that show this.

| kile | $g i$ | ka-drui-a | $k \grave{\varepsilon}-d \bar{\jmath}$ | ke-se-a |
| :--- | :--- | :--- | :--- | :--- |
| how | COMP | C6S-dog-DEF | C6S-land | C6S-ground-DEF |
| 'how the dog fell on the ground' |  |  | (frog SO) |  |


| $x e ́$ | $g i ̀ ~$ | $d z e ́ n i ̄$ | $\bar{e}-k p \bar{e} s \bar{e}$ | $d \bar{\jmath}$ | $k o ̀$ | $\ldots$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| when | COMP | rain | C1S-start | land | just | $\ldots$ |

'when the rain starts to fall... (when the rainy season starts)' (farming SO)
(36) ka-drụi-a tsye ke-ze-do ni ka-ka- $\varepsilon \quad a b a$

C6S-dog-DEF too C6S-IT-land LOC C6S-father-DEF on
'The dog also went and fell on its master.' (frog DA)

The verb hà 'approach' only occurs twice in my data, one of these occurrences can be seen in (37). It has a goal as its direct object, but this goal is not reached. The verb hà only indicates motion towards it. This is as much as I can say about this verb at the moment. More examples of it are needed to draw any further conclusions about its semantics and use.

| xe | wes-ha | li-gba-le | su-ne |
| :--- | :--- | :--- | :--- |
| when | 2S.PROG-approach | C3S-building-DEF | side-? |

'when you approach the building...
(lego KA_RE)

The verb $t i$ 'follow, trace' indicates following a moving goal at a distance. In (38) the kinsmen have already left and a group of people set out to find them. Even when nothing is known about the whereabouts of the 'followed' entity, tí can be used (39).

| $l \varepsilon$ | si | ba | be-tí | be-nime-a |
| :--- | :--- | :--- | :--- | :--- |
| be.at that | C1P | C1P-follow | C1P-kinsmen-DEF |  |
| 'They have to follow their kinsmen.' | (history FY) |  |  |  |

(39) ko akpokplo-e ko bee-ti te
so frog-DEF TOP C1P.PROG-follow like.this
'So it was the frog that they were following.'
(frog SO)

Another way to express 'following' is by using the verb kūni . This verb is likely derived from the verb $k \bar{u}$ 'arrive', by adding the comitative suffix -nì, although it has clearly acquired a more idiosyncratic interpretation. The object of kūnì is always followed by the noun (ke)-de(a) 'back'. The verb is used in situations where the figure moves along with the followed entity, rather than following it from a distance as is expressed by $t i$ 'trace'. The contrast can
be seen when comparing (38) above to (40) below. In (40) some the kinsmen that were traced return together with the people who set out to look for them in (38). As these kinsmen accompany this group, the verb k $\bar{u} n \grave{\imath}$ is used to describe their motion.

| (40) | $b \varepsilon$ | $b e-d z i$ | wa- $\varepsilon$ | po | ba-to | be-kuni | baa-de |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| C1P | C1P-return come-CM | but | C1P-some | C1P-follow | C1P-back |  |  |

### 3.2 Source anchored verbs

In this section I will discuss the Avatime motion verbs that are anchored to a source. These are the four verbs $d \bar{\rho}$ 'move from', $s \grave{\varepsilon}$ 'leave', dò 'move out' and wōlì ‘fall'. All four verbs can or must take a locative source argument.

### 3.2.1 Moving away from a place

The verbs $d \bar{o}$ 'move from' ${ }^{4}$ and $s \grave{\varepsilon}$ 'leave' seem to be very similar, if we look at them using the criteria established so far. Both verbs describe a path anchored to a source, which is expressed by a locative phrase. Neither of the verbs is boundary-crossing. Some examples of the use of the two verbs can be seen in (41), (42) and (43).

| á-dó | òvāno tré | Kumasi |  |
| :--- | :--- | :--- | :--- |
| C1S-move.from:LOC | Vane | go:LOC | Kumasi |
| 'He went from Vane to Kumasi.' |  |  |  |

(S11111 FY)
má-dó òhōlò
1S-move.from:LOC Ho
'I come from Ho.' (indicating ones place of origin)
á-sé blo ke-pe-a me
C1S-leave 1P C6S-house-DEF inside
'he left (from) our house...'
(S11121_CG FY)
Both $d \bar{\jmath}$ and $s \grave{\varepsilon}$ can have an ongoing interpretation in the progressive, see (44) and (45). The verb $s \grave{\varepsilon}$ occurs in the progressive much more frequently than $d \overline{0}$, which I only have two examples of in the progressive aspect, both obtained in elicitation sessions. Whereas one of these, (45), has an ongoing interpretation, the other example of $d \bar{\rho}$ in the progressive aspect (46) results in an iterative interpretation. When example (46) is compared to (47), which has an ongoing interpretation, a clear difference between $d \grave{\jmath}$ and $s \dot{\varepsilon}$ can be noticed.

[^3](44) $l \check{\varepsilon} \quad g i ̀ ~ b \varepsilon ̀ \varepsilon ́-S \tilde{\varepsilon}-\varepsilon$
and COMP C1P.PROG-leave-CM
'And they were going (away).' (frog SN)
$m \varepsilon ̀ \varepsilon ́-d \bar{\jmath} \quad n i ́ \quad \grave{\jmath}-m a ̀-n \bar{\jmath} \quad m \varepsilon ̀$
1S.PROG-move.from LOC C2S-town-DEF inside
'I am coming back from town.'
(S11171 FY)

| $m e ̀ \varepsilon$-ď̆ | j̀vānj̀ $\varepsilon$ ¢ trě | gbàdzēmè |
| :---: | :---: | :---: |
| 1S.PROG-move.from:LOC | Vane SVM go | Gbadzeme |
| 'I always leave Vane to Gb | eme.' | (S11262 FY |


| $m \grave{\varepsilon}$-Š̌ | $̀ v a ̄ n \grave{\varepsilon}$ | $\varepsilon$ | $t r \check{\varepsilon}$ | $g b a ̀ d z \bar{\varepsilon} m \grave{\varepsilon}$ |
| :--- | :--- | :--- | :--- | :--- |
| 1S.PROG-leave:LOC | Vane | SVM | go | Gbadzeme |

'I am leaving Vane for Gbadzeme.' (S11262 FY)

Another difference in use between the two verbs is that $d \bar{\jmath}$ cannot occur or only rarely occurs without indicating the source of motion, whereas $s \grave{\varepsilon}$ regularly does so. An example of the use of $s \grave{\varepsilon}$ without indicating a goal is (48).
(48) keti- $\quad b \varepsilon-s \varepsilon \quad x e \quad b \varepsilon \varepsilon$-tre
daybreak-TOP C1P-leave and C1P.PROG-go
'at daybreak they left, going'
(duck SO)

The differences between $d \overline{\bar{\sigma}}$ and $s \grave{\varepsilon}$ can be explained using the notion of salience as proposed by Botne (2005). He suggests that in Chindali, the motion verbs differ in whether motion or place is salient. This seems to be exactly what is going on in Avatime. The verb $s \grave{\varepsilon}$ denotes saliency of motion whereas with $d \bar{\jmath}$ the source of motion (Botne's place) is salient. The verb $d \overline{\bar{j}}$ is used when the source of motion is not yet known, for instance in the beginning of a story (49). The verb $s \grave{\varepsilon}$ is usually used in situations where the source of motion is already known, such as later in a story. The emphasis on movement is clear in (50), where we know where the witness is and it is only the movement away that needs to be expressed.
$\begin{array}{llll}\text { bé-dó ní } & o \text {-dzogbe-lo } & o-z a-l o \\ \text { C1P-move.from LOC } & \text { C2S-desert-DEF } & \text { C2S-direction-DEF }\end{array}$
'they (our forefathers) come from somewhere near the desert'
(history FY)
(50) dasefo-ye a-ŋaa e-we-la ki wo (...) ko á-sध́ wo sụ-ị
witness-DEFC1S-eat C3P-day-DEF give 2 S (...) then C1S-leave 2 S side-CM 'the witness would stay with you those days, then she would leave'
(ablabe YD_AD)

The verbs $d \bar{\rho}$ and $s \grave{\varepsilon}$ can even occur in the same clause, to emphasize movement first and then source (51).

| a-se | do | ní | presby, | a-za | trē ní | ke-dzi-a me |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| C1S-leave move.from | LOC | presby | C1S-pass | go LOC | C6S-market inside |  |
| 'she went from the presbyterian church (past the deictic centre) to the market' |  |  |  |  |  |  | (S11141_CG DA)

This difference in salience explains why $d \overline{\bar{y}}$ does not occur without a source: source is the most salient part of its semantics. It also explains why $s \grave{\varepsilon}$ is more often used in the progressive aspect. Separation from the source, which $d \overline{\bar{\jmath}}$ emphasizes, is something that happens quickly and not something one would usually want to refer to as ongoing. The motion following this, which is the most salient part of the semantics of $s \grave{\varepsilon}$, is something that can easily be seen as ongoing and therefore referred to in the progressive aspect.

### 3.2.2 The verb dò 'move out, emerge'

The verb dò 'move out' is a boundary-crossing verb, with the source of motion encoded as a locative argument. Unlike the other boundary-crossing verb $k \bar{u}$ 'arrive' (see Section 3.1.2), the verb dò can only be used with an enclosed space as its locative argument. This is usually indicated by the postposition mè 'inside' (52) but other postpositions can be used as well, such as $\bar{e} s e \bar{e}$ ‘under’ (53). The verb dò does not encode any information about the continuation of the path after leaving the enclosure. This information can be added by using the verb zā 'pass' as can be seen in (54). The verb dò is also used to talk about the sun rising, as can be seen in(55).

| akpokplo- | e-dò | ní | tukpa- $\varepsilon$ | me |
| :--- | :--- | :--- | :--- | :--- |
| frog-DEF | C1S-move.out | LOC | bottle-DEF | inside |
| 'The frog came out of the bottle.' |  |  |  |  | (frog SO)


| xe | wo-dó | ye | ese | $a-t o$ | ga | $u$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| when | 2S-move.out:LOC | C1S | under | C1S-ATT | move | ascend |
| 'When you come out from under it, go up.' (lego SN_EA) |  |  |  |  |  |  |


| èé-dò | é | $z \bar{a}$ |
| :--- | :--- | :--- |
| C1S.PROG-move.out | SVM | pass |
| 'He is going out.' |  |  |

(li-we-le) li-ze-dó ya
C3S-sun-DEF C3S-HAB-move.out:LOC here '(the sun) it rises here'

The verb dò can also be used to indicate a figure appearing somewhere, coming to be at a place without specifying exactly how. One could say that this is the case with the sun rising, it suddenly appears. In motion events, the verb dò in this sense is often used to indicate the end of a journey. It is then accompanied by a locative phrase which indicates what could be thought of as the goal of motion. This means that dò would have to be described as a verb (actually the only motion verb in Avatime) that can take both source and goal arguments. Another way to treat this locative phrase which seems to indicate a goal, is to argue that it indicates location and is not an argument of the verb. The locative phrase indicates the location at which the figure appears at the end of a motion event. Unfortunately I do not have any syntactic evidence for a difference between the locative phrases in the two uses of the verb dò. Two examples of the use of dò as marking the endpoint of a journey can be seen in (56) and (57). When dò is used this way, Avatime speakers translate it as 'come', indicating that the event is seen from the perspective of the goal rather than that of the figure.

| $l \varepsilon$ | $b \varepsilon$-tre | $n i$ | tanyigbe-e | $l \varepsilon$ | be-ga | wlo- $\varepsilon$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| and | C1P-go | LOC | Tanyigbe-CM | and | C1P-move | there-CM |
| $l \varepsilon$ | be-dó |  | dodome | awiesune |  |  |
| and | C1P-move.out:LOC | Dodome | Awiesune |  |  |  |

'And they went to Tanyigbe, and they passed there, and they came to (or: emerged at) Dodome Awiesune.' (history FY)

```
wo-ta-ga pepa y\varepsilonlo-y(e) aba ko waa-dó
2S-INT-move paper yellow-DEF top then 2S.POT-move.out:LOC
get-ye ke-de-a-\varepsilon
gate-DEF C6S-back-DEF-CM
'You will pass over the yellow paper, then come (or: emerge/appear) behind the gate.'
```

(lego SN_EA)

### 3.2.3 The verb wālı ‘fall'

The verb w̄̄lı 'fall' contains both manner and path in its semantics. The manner of motion denoted by wālı is moving through the air, without being able to influence ones motion. The path is downwards and is anchored to a source. This source is expressed by a locative phrase, as can be seen in (58). If a goal is to be indicated, this is done via a serial verb construction with the verb $k \bar{u}(59)$.

| $k k e ̄-v e-\bar{a}$ | $k a ́-w \bar{l} / \bar{\imath}$ | $n i ́$ | $\grave{c}-s e \overline{-} l o ̀$ | mè |
| :--- | :--- | :--- | :--- | :--- |
| C6S-bottle-DEF | C6S-fall | LOC | C2S-tree-DEF | inside |
| 'The bottle fell from the tree.' |  | (frog SO) |  |  |

(59) $k \varepsilon$ tsye kị-woli ku ní o-nipo-lo me C4S too C4S-fall arrive LOC C2S-river-DEF inside 'It too fell into the river.' (dog PA)

The verb wālì is often used without a source argument (60). It can also be used causatively in which case there is no locative phrase to indicate source or goal. Goal in this case can be indicated using a serial verb construction with $k p \varepsilon$ 'put' as second verb (61). Used in this way, the verb seems very similar to the verb $y r \bar{\jmath}$ 'drop’, but exploring the difference between these two verbs falls outside the scope of this thesis.

| ba-gbagba | lì-vì-nē | - wólī |
| :--- | :--- | :--- |
| C1P-wasp | C3S-nest-DEF | C3S-fall |
| 'The wasps' nest fell.' |  |  |

(frog SN)
(61)

| le | a-woli | o-nivo- | kpe | ke-se |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| and | C1S-fall | C1S-child-DEF | put | C6S-ground |  |
| 'And it (the deer) dropped the child on the ground.' | (frog SN) |  |  |  |  |

## 3.3 other path verbs

In this section I will discuss the motion verbs that encode features of the path other than its source or goal. They can take a landmark, medium or ground as direct or locative arguments. The verbs that I discuss here are gà 'move', zā 'pass', tsà 'cross', mū 'ascend', plē ‘descend' and klānò 'move around'.

### 3.3.1 The verb gà 'move'

The verb gà is the most unmarked motion verb of the Avatime language. It can be used with or without an object. When it does not have an object, it denotes motion in the broadest sense. It is often translated as 'walk' (62), but it can also be used to denote moving in a vehicle (63). The movement of most animals is also described by gà, even that of animals without legs, as is shown in (64).

| xé | w̄̄-gà | tàe-e | wáà-tsānì | $-g b a ̄$ | $\varepsilon ́-t \bar{\jmath}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| when | 2S-move | small-CM | 2S.POT-meet | C3S-building | C3S-IND |

'when you walk a little, you will meet a certain buidling' (RS09221_dir_market SO)
ma-gá volte aba ní o-hui-lo me
1S-move:LOC Volta top LOC C2S-vehicle-DEF inside
'I went over the Volta in a boat'
(S11111 FY)
(64) $ァ$-gblaga- $\varepsilon \quad$ es-ga

C1S-snake-DEF C1S.PROG-move
'the snake is crawling'
(S11123_RW MM)

When gà does have an object, it denotes a medium. This can be the literal medium within which the figure moves (65), but it can also be an area. When the object of gà denotes an area, the verb can indicate that the figure passed through this area from one side to the other or it can indicate movement within the area. The direction of the movement is always the most unmarked and natural one. In (66) the motion follows the street rather than crossing it. The same can be said for (67), where the area next to the river is followed. When the postposition $s \bar{u}$ is used with a smaller landmark, as in (68), the implication is that this landmark is passed, or in other words, the area next it is crossed from one end to the other. When the area is an enclosed space, the implication is also that the entire area is crossed, as can be seen in (69). Here, there is a clear difference between the transitive use with an object and the intransitive use of gà with a location-denoting ní-phrase. In the latter case, as can be seen in (70), there is no implication that the area is crossed. In other situations the difference between an object of $g$ à and a locative adjunct is not that clear. When (71) and (72) are compared to (65) and (68) respectively, it can be seen that the transitive and intransitive use of gà have very similar functions.
$\jmath$-dze liye se-ga sị-wa-se me

C1S-woman C1S.this C1S.PROG-move C7-grass-DEF inside 'This woman is walking through the grass.' (S11122_SM DA)
(66) gà àbló líyē tò tsā kù-dè bìdī-ō
move street this ATT meet C5S-road big-DEF 'Walk on/follow this street until you meet the main road.' (RS09221_dir_market SO)
a-ga o-nipe-lo su

C1S-move C2S-river-DEF near
'He walked along the river.'
(S11201 FY)
(68) to ga bi-do brown-ye su

ATT move C4P-thing brown-DEF near 'Pass (near) the brown thing.'
(lego KA_EF)
le a-ga li-gba-le me
and C1S-move C3S-room-DEF inside
'and she walked across the room'
(S11141_CG DA)
(70) o-nuvo-є $\quad$ es-ga ni li-po-le aba

C1S-child-DEF C1S.PROG-move LOC C3S-stomach-DEF top
ni li-gba-le me
LOC C3S-room-DEF inside
'The child is moving on its stomach in the room.'
(S11121_SM FY)
es-ga bokos ní grass-ye aba
C1S.PROG-move slowly LOC grass-DEF top
'She is walking slowly through the grass.'

| mi-ga | ní | get | bidi-ye | o-nu |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| C1S.SUBJ-move LOC | gate | big-DEF | C2S-mouth |  |  |
| 'Do I pass in front of the big gate?' |  | (lego DA_FY_3) |  |  |  |

### 3.3.2 The verb $z \bar{a}$ 'pass'

The verb $z \bar{a}$, denotes movement past a landmark. This landmark is a locative argument and is usually marked by the postposition ābà 'top'. This seems to be an idiomatic expression, as I cannot think of any semantics for either zā or ābà which would cause their interaction to produce a sense of 'move past'. Even in (73), where it seems much more likely that the figure would go over the mountain, the combination of $z \bar{a}$ and $\bar{a} b a ̀ ~ d e n o t e s ~ m o v e m e n t ~ p a s t ~ i t . ~$

| $\bar{a}$-zǎ | li-to-le | $a b a$ |
| :--- | :--- | :--- |
| C1S-pass:LOC | C3S-mountain-DEF | top |

'He passed (around or near) the mountain.'
(S11202 FY)

It is not clear to me whether $z \bar{a}$ can be used with a landmark marked by another postposition or without any postposition. My data contains two instances of the former case, in which kē$d \bar{e}$ 'back' and $s \bar{\varphi}$ 'near' are used as postpositions and four instances of $z \bar{a}$ with a landmark not followed by a postosition, all mentioned to me by the same person. One other consultant told me that it was ungrammatical to use $z \bar{a}$ with a locative phrase without postposition and that the landmark could also not be followed by $s \underline{\bar{\varphi}}$ 'near' or mè 'inside'. Example (74) shows two instances of $z \bar{a}$ with a landmark not marked by the postposition ābà. Example (75) shows $z \bar{a}$ in combination with the search domain indicating kēdē 'back' instead of ābà.
(74) ? ${ }^{?}$-se ni roman catholic soleme a-za ni postoffice C1S-leave LOC roman catholic church C1S-pass LOC postoffice
a-za ni etsile junction e-teku asiligbohe me C1S-pass LOC Etsile junction C1S-enter Asiligbohe inside po kú-te klo gi es-tre but 1P.NEG-know place which C1S.PROG-go 'She left the Roman Catholic church, she passed the post office, she passed Etsile junction, she entered Asiligbohe area, but we do not know where she is going.'
(S11141 DA)
(75) ?xe wo-za o-hu-l(o) (k)e-de tre ni arch bidi-bidi-ye ese when 2S-pass C2S-car-DEF C6S-back go LOC arch big-RED-DEF under 'when you passed behind the car, go under the big arch' (lego DA_FY_2)

The verb $z \bar{a}$ can also be used without an argument, in which case it often has a more general 'move' sense. In (76) nothing specific is passed, the verb zā only seems to serve as an indication that the figure has to keep moving. On the other hand, in (77) zā has a clear 'pass' sense. In this frog story picture the bees (or wasps according to this informant) pass the tree with the boy in it, which is the centre of the story at that time. Here the listener can construe the landmark that is passed based on the context.

| $x{ }^{\text {e }}$ | Weq-tre | $n i$ | ka-ba-e | xe | wo-za | straight | xe |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| when | 2S.PROG-go | LOC | C6S-top-CM | when | 2S-pass | straight | when |
| wes-tre | xe | $g i$ | wo-na miss | Gbag | gbo ye | 1i-lo-E |  |
| 2S.PRO | -go when | COMP | 2S-reach miss | Gbag | gbo C1S | C3S-p | ce-CM | 'when you are going to 'uptown', and you walk straight and you are going (away), if you reach miss Gbagbo's end...'

(dir_house_ED)

| $1 \varepsilon$ | $b \bar{a}-g b \bar{a} g b \bar{a}$ | tsy $\bar{\varepsilon}$ | $b \dot{\varepsilon} \varepsilon \dot{\varepsilon}-z a-\varepsilon$ |
| :--- | :--- | :--- | :--- |
| and | C1P-wasp | too | C1P.PROG-pass-CM |

'And the wasps were passing.'
(frog SN)

Even though $z \bar{a}$ can be interpreted as denoting a very unmarked motion event, as could be seen in (76), I suggest that $z \bar{a}$ encodes movement past a landmark. In absence of an overt landmark, the listener either construes a landmark based on context (as can be seen in (77)) or when this is not possible interprets $z \bar{a}$ as motion without source or goal, past unmentioned things which are not important.

### 3.3.3 The verb tsà 'cut, cross'

The verb $t s a ̀$ is used to refer to boundary-crossing events. One sense of this verb is 'cut'. In this sense its object is a theme, something which is cut with a knife or scissors. In motion events, the verb tsà has a boundary-crossing sense and its object is a landmark which is seen as a boundary. The difference with the other boundary-crossing verbs $k \bar{u}$ and dò, is that the focus of $t s a ̀$ is on the boundary itself, whereas $d o ̀$ and $k \bar{u}$ focus on the area that is entered or left. The boundaries that the objects of tsà refer to in my data are roads (78), rivers (79) and lakes. The crossing of boundaries that involve vertical motion cannot be expressed by $t s a ̀$, as (80) shows.
$\begin{array}{lll}\text { bev-tsa } & k u-d e-o & b \varepsilon \text {-traa } \\ \text { C1P.PROG-cut } & \text { C5S-road-DEF } & \text { C1P-be.coming }\end{array}$
'They crossed the road and they are coming.'
(S11121_SM FY)
mā-tsà ò-nīpò-lō
1S-cut C2S-river-DEF
'I crossed the river.'
(S11171 FY)

```
*a-tsa li-to-le
C1S-cut C3S-mountain-DEF
```

'He crossed/went over the mountain.'

The verb $t s a ̀$ in its 'cross' sense does not occur very frequently in my data. There is another way to express crossing a boundary, which is using a serial verb construction with final $z \bar{a}$, something I will come back to in Chapter 4.

### 3.3.4 Motion on the vertical plane

Avatime has two verbs for general vertical movement: $m \bar{u}$ 'ascend' and $p l \bar{e}$ 'descend'. The object of these verbs is the ground, seen as a whole. This ground has to have a vertical dimension (81). However, the verbs are often used without an object. When source and/or goal are to be indicated, this is usually done by adding a second verb to the construction, as can be seen in (82) and (83).
(81) xe wo-ta-na lị-klâkps green to to mu ne to ple le when 2S-INT-reach C3S-stone green IND ATT ascend C3S ATT descend C3S 'when you reach a certain green stone, climb it and descend it' (lego KA_EF)

| ē-ple | á-dó | amedzofe | $b \bar{a}$ | avānò |
| :--- | :--- | :--- | :--- | :--- |
| C1S-descend | SVM-from:LOC | Amedzofe | come | Vane |
| 'he descended from Amedzofe to Vane' |  | (S11111 FY) |  |  |

$\bar{o}-n i ̀ v \bar{o}-\varepsilon \quad \bar{e}-m u \bar{u} \quad k \bar{u} \quad n i ́ \quad o ̀-s \bar{e}-l o ̄ \quad m e ̀ ~$ C1S-child-DEF C1S-ascend arrive LOC C2S-tree-DEF inside 'the child climbed into the tree'
(frog SN)

It is also possible to use a locative phrase to express a source with the verb plē and a goal with the verb $m \bar{u}$. However, I have very few examples of this. The only example with $m \bar{u}$ is (84). With the verb plēI have a similar example, from the same elicitation session (85). The verb plē is used to indicate getting out of a vehicle, in which case the source is expressed by a locative phrase, as can be seen in (86). Contrary to what might be expected, the verb $m \bar{u}$ is not used to express boarding a vehicle. It can be used, but only in combination with $k \bar{u}$ 'arrive'. Usually, the verb kū on its own is used to describe this situation (87).

$$
\begin{array}{llll}
\bar{e}-m u \bar{u} & n i ́ & l \bar{l}-g b \bar{a}-l(\varepsilon) & \bar{a} b a ̀ ~ \tag{84}
\end{array}
$$

C1S-ascend LOC C3S-building-DEF top
'He climbed onto the building.'
(S11171 FY)

| è-plē | ní | $l i ̄-g b a ̄-l(\varepsilon)$ | ābà | $b \bar{a}$ | ní |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |

C1S-descend LOC C3S-building-DEF top come LOC C6S-ground-DEF 'He went off the roof of the house and came to the ground.' (S11171 FY)

| e-plé | $o-h u-l o$ | me |
| :--- | :--- | :--- |
| C1S-descend:LOC | C1S-car-DEF | inside |

'He got out of the car.'
(S11171 FY)

| e-kú | o-hu-lo $\quad$ ď̌ | svans | trě | amedzofe |
| :--- | :--- | :---: | :--- | :---: |
| C1S-arrive:LOC | C2S-car-DEF move.from:LOC | Vane | go:LOC | Amedzofe |
| 'He joined the car from Vane to Amedzofe.' |  | (S11202 FY) |  |  |

### 3.3.5 The verb klānd 'circle/move around'

The verb klānò 'circle/move around' is used to describe motion events with an unanchored path. It has an alternative form klānì which seems to be in free variation with it. When the verb klānò is used without an object the verb describes a path that is not straight. It was used in the 'Come' and 'Go' questionnaire to describe a scene in which the path is randomly twisting and turning (88).
̀̀ $\varepsilon$-klānı̀
C1S.PROG-move.around
'He is roaming about.'
(S11121 FY)

The verb can also have a landmark as its object. In that case the path circles the landmark (89).
(89) é-klani blo ke-pe-a me ko

C1S.PROG-move.around 1P C6S-house-DEF inside just
'she is just going around our house'
(S11141 DA)

The second syllable of the verb klāno is clearly the comitative suffix, as this suffix also has the two shapes $-n o$ and $-n i$ which seem to be in free variation. However, there is no verb kla in my data from which this verb could have been derived. In (90) it can be seen that the verb klānò can also be used comitatively. As there are no comitative semantics in examples (88) and (89) it could be that the comitative suffix has lexicalized with the verb and the resulting verb klāǹ̀ has taken over the semantics and use of the original verb kla.
(90) ko be-klani wo $\uparrow$-ma-no- $\varepsilon$
and C1P-move.around 2S C2S-town-DEF-CM
'you would be taken round the community' (ablabe YD_AD)

## 3.4 manner verbs

In this section, I will discuss all the Avatime verbs that I encountered which denote manner of motion. As manner verbs can vary much more and in less predictable ways than path verbs and are therefore more difficult to elicit, the list here is probably far from exhaustive.
However, it seems clear that the manner verb lexicon of Avatime is much smaller than that of satellite framed languages like English. Neither frog stories nor the 'manner clips', a set of elicitation videos designed by Slobin (1992) yielded the variety of manner verbs that would be present in English versions of these tasks. I will come back to this issue in Section 3.5. The present section is divided into three parts: manner of motion verbs (3.4.1), other manner verbs (3.4.2) and verbs that denote a change of orientation (3.4.3).

### 3.4.1 Manner of motion

The most frequent manner of motion verb in my Avatime data is $s \bar{e}$. It is usually translated as 'run', but it denotes the more general concept 'move fast'. In example (91) it is used for a human moving fast. In (92) it can be seen that the Avatime verb sē does not entail the specific type of movement of the legs that the English verb run does, as bees are the subject of $s$ ē here. Other examples of animals that cannot 'run' in English but that can 'se'in Avatime are snakes and flying birds. I do not know whether inanimate objects (e.g., cars) are also used as figures of $s \bar{e}$, but given the semantics of $s \bar{e} \mathrm{I}$ would expect them to. Another indication that the semantics of $s \bar{e}$ is different from English run is that a video of a man jogging in place could not be described with sē. People used verbs like yo exwila 'jump', pị 'hop' or described the scene as 'exercising'. In (93) it can be seen that the semantics of $s \bar{e}$ has been extended to include the notion 'escape'.
(91) o-nyime liye ee-se kul

C1S-man C1S.this C1S.PROG-move.fast ID
'This man is running fast.'
(S11121 FY)

| be-bu-a | be-se | za | speed |
| :--- | :--- | :--- | :--- |
| C1P-bee-DEF | C1P-move.fast | pass | speed |
| 'The bees went past very fast.' |  |  |  |


| $l \check{\varepsilon}$ | àkpjkpl̄̄- $\varepsilon$ | $\bar{e}-d o ́$ | $t \grave{̀} k p \bar{\varepsilon}$ | $m \bar{\varepsilon}$ | $l \check{\varepsilon}$ | $\bar{e}-s \bar{e}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| and | frog-DEF | C1S-exit:LOC | bottle | inside | and | C1S-move.fast |
| 'Then the frog went out of the bottle and escaped.' |  | (frog SN) |  |  |  |  |

The verb prūdū 'fly' is not used much in Avatime. The frog story contains several scenes where animals fly: bees chase the dog and fly past and an owl flies out of its hole and then comes after the boy. However, the verb prūd $\bar{u}$ was not used in any of the frog stories I collected, or in any other stories. Scenes with flying animals were usually described with path verbs only. Perhaps in these cases the verb prī$d \bar{u}$ would unnecessarily draw attention to the
manner of motion, while it is in fact the unmarked way of moving for these animals. The only spontaneous uses of the verb prūd $\bar{u}$ (not translated from English) that I collected are from one of the 'run walk crawl climb' elicitation videos. This shows a bird flying, followed by the camera. All consultants used the verb prū$d \bar{u}$ to describe this (94), probably because flying is the only thing happening in the video.

> ka-dzoz-a $\quad$ kee-prudu
> C6S-bird-DEF C6S.PROG-fly
> 'The bird is flying.'
(S11123 MM)

A verb that is often mentioned as a typical manner of motion verb is crawl. Avatime uses the verb $t i$ for this. This is used for motion of a human figure with hand and knees or feet touching the ground. The prototypical figure is a baby or small child (95). When adults move on their hands and feet or hands and knees, some people readily use $t i$ as well, but others prefer a description like the one in (96). It is not usually used with animals as figures, although when suggested, one of my consultants approved of describing crawling snakes, a crawling fish (on the land) and a sliding penguin with the verb $t i$. In the case of the penguin, $t i$ was his own suggestion and according to him, $t i$ can be translated as 'slide'. Using $t i$ to describe the movement of bugs, turtles, lizards, a chameleon, a crocodile and a koala was judged incorrect. So it seems that, at least for this consultant (I did not check this with other people) $t i$ has a meaning of a figure moving with his/her/its whole body touching the ground. The verb tì has another meaning, which is something like 'moving close'. I only have one example of this use of $t i$ with this, from a session with three children (S200810031). At some point in the recording one child says $t \grave{t} t i ̀ w \bar{a}$ (move.close move.close-come) 'move closer, come closer' to one of the other children, telling her to move closer to the recorder. Ford (1971: 115) describes the verb $t i$ with the meaning 'crawl, toddle, edge-up'. As could be seen in Section 3.1.2, the verb $t i$ also forms part of the verb tikul tuku 'enter', in which it seems to have lost most of its semantics.

$$
\begin{array}{ll}
\overline{\text { on}} \text {-nùv̄̄- } \varepsilon & \text { èé-tì }  \tag{95}\\
\text { C1S-child-DEF } & \text { C1S.PROG-crawl } \\
\text { 'The child is crawling.' }
\end{array}
$$

(RS09221_SM SO)

| $\varepsilon \varepsilon$ - $g a$ | $n i$ | $a-k l a m a s i ́-n \varepsilon$ | $a b a$ |
| :--- | :--- | :--- | :--- |
| C1S.PROG-move LOC | C3P-knee-DEF | top |  |

'She is moving on her knees.'
(S11131_RW DA)

A verb used by one of my consultants to describe movement in which the same part of the figure stays in contact with the ground during the motion, is the verb hē ‘slide/shuffle’. This was not used to describe the movement of any animals (although I did not check if it was possible to use it) but it was used to describe somebody shuffling, people crawling with their belly on the ground (97), somebody dragging a chair and a sliding coin (98). As can be seen
in the examples below, the moving figure can be either the subject of the verb (97) or the object (98) in which case the subject is the causer.

C1S-child-DEF C1S.PROG-slide LOC C6S-ground-DEF
'The child is sliding on the ground.' (crawling with his belly on the ground)
(RS09221_SM SO)

C1S-slide C4S-money-DEF LOC C2S-table-DEF top 'She slid a coin on the table.'
(RS09223 SO)

The verb mlì 'to roll' can also be used intransitively (99) with the figure as its subject or transitively with the figure as its object and a causer as subject (100). Like the English verb roll it describes a manner of motion of something round moving by turning around its axis.
bol-ye ee-mlīi ple lìtō-lè
ball-DEF C1S.PROG-roll:SVM descend C3S-mountain-DEF
'The ball is rolling down the hill.'
(S11111 FY)
(100) èé-mlì tùkpa- $\bar{\varepsilon}$ ní ò-kpl̄̄-nò ābà

C1S.PROG-roll bottle-DEF LOC C2S-table-DEF top
'She is rolling the bottle on the table.'
(RS09223 SO)

The verb nyro can be glossed as 'sink' or more precisely as 'go down in water'. As this description shows, this verb lexicalizes both manner and path. It cannot take a ground argument though. It can be used transitively in which case it has a causative meaning (101). The only intransitive use of nyro occurring in spontaneous speech is example (102). Some more examples of it occur in an elicitation session where a consultant was asked to translate 'the stone sank' into Avatime.
(101) a-nyr刀 fomizi-e kpe ní o-nipo-lo me

C1S-sink rabbit-DEF put.in LOC C2S-river-DEF inside
'He put the rabbit under water.' (duck SO)
(102) ka-drui-a ke-pe ke-nyr刀 kú ku-ni-o me

C6S-dog-DEF C6S-want C6S-sink into:LOC C5S-water-DEF inside 'The dog wanted to go into the water.'
(frog SO)

### 3.4.2 Other manner verbs

In this section, I describe four verbs which do not encode motion, but are frequently used to indicate manner of motion. The first one is wlo, which usually means 'bathe' or 'wash
oneself' but it can be used to mean 'swim'(see (103) and (104)). Some people have emphasized that for it to mean 'swim', it has to be used with the locative phrase ni kunio me 'in the water' or ni onipolo me 'in the river' (103). However, it seems that this is only necessary to disambiguate the verb in contexts where it could mean either bathe or swim. In (103) this is the case, as the duck is personified in this story, but in (104) a video of a platypus is described and bathing is not an option. The verb wlò can be used in motion constructions with a path verb as the second verb, as can be seen in (105).
(103) kpakpaxe-e i-ze-wlo o-nipo-lo
duck-DEF C1S-HAB-swim C2S-river-DEF
'The duck usually swims / knows how to swim.'
(duck SO)
(104)
$\begin{array}{ll}\text { o-ga-to } & \text { ee-wlo } \\ \text { C1S-animal-IND } & \text { C1S.PROG-swim }\end{array}$
'Some animal is swimming.'
(S11131_RW DA)

| mē-wlò | volte | lī-mù-n(e) | $\bar{a}-z a ̄$ |
| :--- | :--- | :--- | :--- |
| 1S-swim | volta | C3S-lake-DEF | SVM-cross |

'I swam across lake Volta.'

Another verb frequently used in motion constructions is $y \bar{o}$ 'get up, jump'. This verb denotes upwards motion of the body using the body's own force. This can be accomplished by changing position, in which case the English gloss is 'get up'. The other way to accomplish the upwards motion is by using muscular force to get oneself off the ground for a short period of time, as in English 'jump'. When yōis used in its 'jump' sense it is often combined with the noun lixwile 'jump', or its plural exwila (106). In this sense the verb can be used in motion constructions in which a second verb indicates some path element (107).


A verb very similar to $y \bar{o}$ but less frequent is $p \overline{1}$ ‘hop, jump’. The only occurrences of this verb that I collected are from children between 12 and 18 . I did not check whether older people knew the verb or what it means according to them. As can be seen in (108) pị can be used like $y \overline{\text { ōto denote hopping. }}$

| $\varepsilon \varepsilon-p i$ | (e-xwi-la) |
| :--- | :--- |
| C1S.PROG-jump | (C3P-jump-DEF) |

'He is hopping.'
(S10031_RW ED)

Unlike $y \bar{\Omega}, p \overline{1}$ can be used with a locative phrase to indicate crossing a boundary by jumping over it, as can be seen in (109). So apart from a manner component, the verb pī also seems to encode a path element. But more examples are needed to be certain about the semantics and use of this verb.

## (109) to pí ku-ka-a <br> ATT jump C5S-fence-DEF

'Jump over the fence.' (lego KA_EF)
 describe any action that can be done fast. In motion constructions it is used to describe people walking fast. The speed of motion described by $k \bar{s} s i$ is less than that of motion described by
 a higher speed than usual. Running is something that people only do if they want to move very fast and then $s \bar{e}$ is the appropriate verb.

غ̀ $\varepsilon$-kōsì xé $\grave{\varepsilon} \varepsilon$-zā
C1S.PROG-hurry and C1S.PROG-pass
'She is walking fast and passing.'
(RS09221_SM SO)

### 3.4.3 Change of orientation

The verbs in this section are not manner of motion verbs, but they either frequently occur in motion expressions (tsyí and yà) or translate to an English motion verb (gléè). All three of them are verbs which indicate a change of orientation, rather than a change of location or manner of motion.

The verb gléè needs to be mentioned for its comparison to the verbs w̄̄lì and d̄̄. Like these two verbs, gléè can be glossed as 'fall', but unlike them, gléè is not a motion verb. The verb gléè is only used for the change from an upright position to a sitting or lying position of an animate figure. This change happens suddenly and the body comes into contact with the ground forcefully (111). It is not used for the kind of 'falling' where the figure moves downwards through the air before coming into contact with the ground. This kind of event is described by the verb $w \bar{\jmath} l i$, or possibly by the verb $d \overline{0}$.

عe-ga ee-gléè
C1S.PROG-walk C1S.PROG-fall
'It is walking and falling down.' (description of a video of a baby monkey trying to walk but falling several times)
(S11123_RW MM)

The two other verbs that I will mention in this section are both used in the description of motion events but do not indicate any aspect of motion themselves. Rather, they indicate a change of orientation which precedes motion. The verb yā is the least frequent of the two. It is related to the noun liya 'branch' and is used to indicate a change of direction (112).
$\begin{array}{lllllll}\bar{a}-\text {-tráà } & p \grave{j} & \bar{a} \text {-yà } & k \bar{u} & n i ́ & \grave{j}-k \bar{\jmath} & d z \bar{e} d z \bar{e} \\ \text { C1S-be.coming } & \text { but } & \text { C1S-branch } & \text { arrive } & \text { LOC } & \text { C2S-place } & \text { different }\end{array}$
'She was coming but she branched to another place.' (S11172_CG MM)

The more frequently used verb tsyí 'turn' can be used for the same purpose as yā, as can be seen in (113). However, whereas yā can only be used to indicate a change of direction in a motion event, tsyícan also refer to a figure staying in one place and turning around (114). The verb tsyíis very often combined with the verb klāny 'move around' (115). There does not seem to be a difference in meaning between using klānj̀ in a single verb construction and using the combination tsyí klāǹ, except that the latter phrase cannot be used comitatively as klāǹ̀ can.
to tsyi tre ni o-ma-no me o-za-lo
ATT turn go LOC C2S-town-DEF inside C2S-direction-DEF
'Turn and go in the direction of the town.' (lego KA_RE)
(114) e-tsyi ke-de-a kpe blo

C1S-turn C6S-back-DEF put 1P
'He turned his back to us.' (S11122_SM DA)

| ba-doze-a | be-tsyi | klano | o-se-lo |
| :--- | :--- | :--- | :--- |
| C1P-monkey-DEF | C1P-turn | move.around | C2S-tree-DEF |
| 'The monkeys are turning/going around the tree.' | (RS09231_RW SO) |  |  |

### 3.5 A comparative perspective

Table 3.1 at the end of this section gives an overview of all Avatime motion verbs discussed in this chapter. As can be seen in this table, there are many verbs in Avatime that conflate motion and path. Unlike English path verbs, these verbs are used frequently and constitute the only way in Avatime to express the notion path. This means that Avatime behaves like a verb framed language. Thus Avatime follows the common pattern for African languages, noticed by Schaefer and Gaines (1997), to lexicalize motion + path in the verb.

Like almost all languages, satellite framed or verb framed, Avatime has verbs that denote manner of motion. As I pointed out in Chapter 1, verb framed languages generally have a poorer manner verb-lexicon than satellite framed languages. This was noticed by Slobin (1997a: 459), who makes a distinction between two tiers of manner verbs: "the neutral,
everyday verbs - like walk and fly and climb, and the more expressive or exceptional verbs like dash and swoop and scramble." Manner verbs of the first tier occur in all languages but manner verbs of the second tier do not occur often or at all in V-languages, though they are abundant in S-languages. Most of the verbs described in section 3.4 seem to be verbs of the first kind. The only possible exception is kōsì, which seems somewhat more expressive although its semantics is not as detailed and expressive as that of verbs like dash and swoop. So again, due to its small manner verb lexicon, mainly restricted to tier 1, Avatime looks like a typical verb framed language.

As I pointed out in Chapter 1, several authors have argued for a third type of language: equipollently framed. Zlatev and Yangklang (2004) and Chen and Guo (2009) found for Thai and Mandarin Chinese respectively, two equipollently framed languages, that their manner verb lexicon is richer than that of verb framed languages. According to Chen and Guo, the size of the manner verb lexicon of Mandarin is significantly larger than that of V-languages, even though it is smaller than that of S-languages. Zlatev and Yangklang (2004: 165) point out that Thai has a large number of manner verbs, including "verbs making rather fine semantic distinctions, typical of (...) S-languages, e.g., kracoon 'leap', jôn 'tiptoe', kâaw 'stride', khajèy 'limp', lúaj 'creep’ (of snake-like animals), luj 'wade', bùt 'rush', hè $\varepsilon$ 'parade' and khajàp 'bulge/extend'." So even though Avatime has a similar lexicalisation pattern (expressing manner and path in serial verbs), it is not similar to Mandarin and Thai with respect to its manner lexicon. This seems to contradict Slobin's (1997a) claim that lexicalisation pattern influences the lexicon of manner verbs. A possible explanation for this difference could be that Avatime has an overall smaller verb lexicon than both Mandarin and Thai. It is known that other Kwa languages generally have small verb lexicons (Ameka, p.c.), but how many verbs there are in Mandarin and Thai is not known to me. Another fact that should be noted here is that Avatime has other resources than verbs available to describe manner of motion. It has ideophones which depict the kind of expressive meanings that are categorized as tier 2 by Slobin (1997a).

Apart from having a richer manner verb lexicon, satellite framed languages also use manner verbs more frequently than verb framed languages. Slobin (2004) compares the use of manner verbs in a frog story scene across several verb framed, satellite framed and equipollently framed (serialising) languages. The scene used for this comparison is the picture in which an owl emerges from a hole in a tree with its wings spread. Slobin found that the two serialising languages in his sample, Mandarin Chinese and Thai, used manner verbs even more often than most satellite-framed languages whereas verb framed languages hardly used manner verbs at all. In Avatime, all frog story tellers used a path verb to describe the scene in which the owl emerges from the hole. Essegbey (2008) makes the same observation for Nyangbo, a language closely related to Avatime. In his collection of frog stories, none of the speakers used a manner verb to describe this scene. So again, Avatime (together with its neighbour Nyangbo) behaves like a verb framed language and unlike the other serialising languages Mandarin Chinese and Thai. Explaining the absence of manner verbs in the description of the frog story scene in verb framed languages, Slobin (2004: 226) points out that "Typically, in

V-languages, a neutral verb of motion is used to designate a creature's normal manner of movement: owls 'go', fish 'go', people 'go', cats 'go' and so forth. Manner verbs are used when manner is foregrounded". This seems to be the case in Avatime as well. As I pointed out in Section 3.3.1 the normal movement of all humans, animals and vehicles is described with the verb gà 'move'. In Section 3.4.1, I mentioned that the Avatime verb prūdū̄ 'fly' is not used in any stories or normal conversations. The only context in which it was used in my data, is describing a video in which flying is the only thing happening. In line with Slobin's explanation, I would say that flying is foregrounded in this motion expression, simply because there is nothing else that can be foregrounded.

Altogether, looking at the Avatime inventory of motion verbs and the use of these verbs, Avatime behaves like a verb framed language. Even in comparison to Mandarin Chinese and Thai, which have a similar motion lexicalisation pattern to Avatime, Avatime looks more like a verb framed language than like these two languages. In the next chapter, I will look more closely at the lexicalisation pattern of Avatime by studying constructions in which motion verbs are combined.

Table 3.1 Avatime motion verbs

| verb | type of ground argument | semantics |
| :---: | :---: | :---: |
| $b \bar{a}$ | goal | move to a goal located between source and deictic centre or at the deictic centre |
| $d \overline{0}$ (raising tone) | source (loc) ${ }^{5}$ | move away from source, source salient |
| $\begin{aligned} & d \bar{\sigma} \text { (stable } \\ & \text { tone) } \end{aligned}$ | goal (loc) | come into contact with goal after being in the air |
| dò | source (loc) | cross boundary of an enclosed source area |
| $d z \bar{\varepsilon}$ | goal | move to a goal not located between source and deictic centre ? |
| dzì | goal? (loc) | move to a goal after moving away from it |
| gằ | medium | move (within or through medium) |
| gléè | - | sudden change of orientation from upright to sitting or lying, outside the figure's control |
| hà | goal | move towards goal without reaching it |
| $h \bar{e}$ | - | move while constantly touching ground with the same part of figure |
| kōsì | - | (move with the manner of) hurrying |
| klānì | landmark | move around (landmark) |
| ${ }^{k} \bar{u}$ | goal (loc) | move to a goal area, crossing its boundary |
| kuni | - | move along with somebody |
| mlì | - | move by turning around axis |

[^4]| $m \bar{u}$ | ground | move upwards |
| :---: | :---: | :---: |
| nà | goal | reach a goal |
| nyrò | - | move downwards in water without the figure's control |
| pí | landmark? | (move with manner of) jumping |
| plē | ground | move downwards |
| $p r u ̄ d \bar{u}$ | - | fly |
| $s \bar{e}$ | - | move with speed |
| $s \grave{\tilde{\varepsilon}}$ | source (loc) | move away from source, motion salient |
| tí | goal | move in the direction of a moving goal |
| tì | - | move with body closer to ground than usual / move close to a place |
| tráà | goal (loc) | move towards goal, which is deictic centre or between source and deictic centre, without reaching it |
| $t r \bar{\varepsilon}$ | goal (loc) | move to a goal (which is not between source and deictic centre) |
| tsà | landmark | cross boundary that is represented by landmark |
| tsyí | - | turn |
| tùkū | goal (loc) | cross boundary of an enclosed goal area |
| wōlì | source (loc) | move away from source through the air downwards, without the figure's control |
| wlò | - | (move with the manner of) swimming |
| $y a ̄$ | - | change orientation on path |
| $y \overline{0}$ | - | (move with the manner of) jumping |
| $z \bar{a}$ | landmark (loc) | pass landmark |

## 4. Complex motion expressions

In this chapter I will investigate complex motion expressions in Avatime. These are constructions in which either manner and path or several path elements are combined.

As multi verb constructions are often used for complex motion expressions, I will give some background information about these constructions first. There seem to be two types of multi verb construction that are used in the expression of motion: serial verb constructions (SVCs) and what I will call consecutive constructions. I will describe the properties of these constructions in Section 4.1.

After the description of what multi verb constructions in Avatime look like, I will look into the lexicalisation of motion in Avatime from a semantic and typological point of view. In Section 4.2 I will show how manner and path are combined. Section 4.3 will discuss the expression of complex path. In both sections, I will place my findings in a typological perspective. Finally, I will summarize the chapter and draw conclusions in Section 4.4.

### 4.1 Multi verb constructions

### 4.1.1 Serial verb constructions

Serial verb constructions are constructions in which two verbs are combined without a coordination or subordination marker. In Avatime SVCs the first verb is fully marked for person/noun class, number and aspect/mood and the second verb is not. There is often some form of marking on either the second verb or the element preceding it. Sometimes this marking looks like a reduction of the full subject prefix that occurs on the first verb and sometimes it is a fixed marker, the form of which depends on the TAM category of the first verb. The marking can be left out, sometimes leaving a trace in the form of a lengthened final vowel of the word preceding the second verb. An example of a serial verb construction with reduced marking on the second verb can be seen in (1). I will refer to these markers as serial verb markers (SVM). An example of a serial verb construction in which the serial verb marker is elided can be seen in (2).

| $m e ̀-m \bar{u}$ | à- $g \bar{a}$ | $b(\varepsilon)$ | $\bar{a} b a ̀ ~$ |
| :--- | :--- | :--- | :--- |
| 1S-ascend | SVM-move | C4P | on |
| 'I climbed on/over it.' |  |  |  |

(lego DA_FY_1)

| ē-hēe | tsísī | $y \bar{e}$ |
| :--- | :--- | :--- |
| C1S-slide:SVM | take.to | C1S |
| 'She slid (it) to her.' |  |  |

(RS09223 SO)

An often-mentioned characteristic of SVCs is that they consist of two or more VPs in series that form a single clause (cf. Ameka 2003; Aikhenvald 2006). Some characteristics of SVCs
in West African languages that Ameka (2003:5-6) mentions are that there cannot be any marking of syntactic dependency between the VPs, the VPs should share the same mood, the VPs cannot be formally independently negated and all VPs in the series share the same syntactic subject. All these properties apply to the Avatime constructions that I will describe in this section. They can be easily observed in most of the examples that are to come, so I will not demonstrate all of them immediately. The only property that I will show here is the impossibility of formally negating one of the VPs and not the other. Example (3) shows that the negative serial verb marker in the first person aorist is $\bar{\sigma}$-. In (4) it can be seen that it is not possible to use the positive serial fist marker $\bar{a}$ - when the first verb is negated.
(3) módǒ gbàdzāmóobā òvānò

| mó-ď̌ | gbàdzēmè | ó-bā | ว̀vānò |
| :--- | :--- | :--- | :--- |
| 1S.NEG-move.from:LOC | Gbadzeme | SVM-come | Vane |

'I did not come from Gbadzeme to Vane.' (S11262 FY)

$$
\begin{array}{llll}
* \text { mó-ď̌ } & g b a ̀ d z \bar{\varepsilon} m \grave{\varepsilon} & \bar{a}-b \bar{a} & \text { òvāǹ̀ } \\
\text { 1S.NEG-move.from:LOC } & \text { Gbadzeme } & \text { SVM-come } & \text { Vane }
\end{array}
$$

(S11262 FY)
Ford (1971) also discusses Avatime serial verb constructions. According to him these constructions are a form of coordination, marked by a serial linker $k u$ - which is prefixed to the second verb. He states that this linker is sometimes pronounced as $k u$ - in slow speech, but that it is usually reduced. To what form it reduces depends on the TAM category of the first verb. In all my Avatime data I have not once heard a serial verb construction with this linker ku-. The different forms of serial verb marking that I have found in the different TAM categories do look very similar to Ford's reduced linkers. But since I did not find any evidence for an overt linker $k u$-, I will not assume that the different forms of serial verb marking are derived from the same underlying form.

As I already mentioned above, serial verb markers are often elided. In fact, some speakers do not use the serial verb markers at all. These speakers either lengthen the vowel preceding the second verb or do not use any marking. Whether or not serial verb markers are used depends on the age of the speaker. Old speakers use serial verb markers frequently, whereas younger speakers do not use them at all. ${ }^{6}$ Thus, the markers seem to be disappearing from Avatime. The only example of the use of serial verb marking by a younger person is from an elicitation session with a 19 -year-old consultant which was aimed at eliciting the markers. He only used them in the aorist when the subject was singular. In other aspects and moods he either lengthened the vowel preceding the second verb, or did not use any serial verb marking.

[^5]In the rest of this section, I will describe what the serial verb markers look like in the different aspects and moods.

### 4.1.1.1 Aorist

In serial verb constructions in the aorist, there is a different marking on the second verb for singular and plural subjects. When the subject is singular, the second verb has a prefix which consists of the normal prefix for that person or class without the initial consonant. The tone on this prefix varies in the same way as the tone on a regular subject prefix does (as described in Section 2.3.2). Like other prefixes, the ATR quality of these prefixes depends on the ATR value of the verb. Examples can be seen in (5) to (8).
(5) mè-sē è-mū trēe àmèdzòfē

1S-run SVM-ascend go:LOC Amedzofe 'I ran up to Amedzofe.'
(6) nifo wòdz̄̄bā
nifo wò-dz̄ $̀$ ̀̀-bā
where 2S-go SVM-come
'Where did you go to and come back (from)?'
(S11171 FY)

| ko ye tsye | e-dz(i) | a-tre | ye | ne | va | ke-pe-a | $m \varepsilon$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| then 1 C1S too | C1S-return | SVM-go:LOC C1S | mother ? C6S-house-DEF | inside |  |  |  |
| 'Then she would also return to her mother's home.' | (ablabe YD_AD) |  |  |  |  |  |  |

(8) kādzòyā kēprùrēs̀̀̀

| kā-dzoè-ā | kē-prùdù | $\bar{\varepsilon}$-s s̀̀ |
| :--- | :--- | :--- |
| C6S-bird-DEF | C6S-fly | SVM-leave |

'The bird flew away.'
(S11111 FY)

When the subject is plural, the serial verb marker is $E$, changing into $I$ when the previous vowel is $i$ or $u$. It has a mid tone. It is difficult to determine whether this marker is a prefix on the second verb, or a particle which attaches to the previous word. Speakers usually do not pause or make glottal stops between words. A clue to the status of the marker could be whether or not it harmonises with the second verb; if it does it is probably a prefix.
Unfortunately, I do not have enough data with serial verb markers of which I am sure about the ATR value, so I cannot conclude anything about this. One bit of evidence that points to the attachment of the serial verb marker to the previous word, is that it assimilates to the previous vowel in vowel height. Examples of serial verb constructions with plural subjects can be seen in (9) and (10).

## (9) kīg $\bar{\varepsilon} d o ̀$

ki-ga $\varepsilon$ do

1P-move SVM move.out

| xe | be-tu | $i$ | tsing | wlo | $e-w e$ | tataa | wlo- $\varepsilon$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| and | C1P-carry | SVM | take.to | there | C3P-day | C3P.three | there-CM |
| 'And they would send it to her for three days.' | (ablabe | YD_AD) |  |  |  |  |  |

I do not have many examples of serial verb constructions in the negative aorist. It seems that the serial verb marker in these examples is either a reduced form of the prefix on the first verb or it always $\delta$ - (11). Examples with subject prefixes that do not contain $O$ could easily show which of the two analyses is correct. When the previous vowel is $a$, the prefix $O$ - is not realized. Instead, $a$ is lengthened and raises to a high tone (12). As I mentioned earlier younger speakers leave out the serial verb marking except its tone which is realized on the previous syllable, as can be seen in (13) ${ }^{7}$.
(11) módŏ gbà $d z \bar{\varepsilon} m o ́ v b a ̄ ~ \grave{j u a ̄ n \grave{~}}$

| mó-dǒ | gbàdzēmè | ó-bā | òvānò |
| :--- | :--- | :--- | :--- |
| 1S.NEG-move.from:LOC | Gbadzeme | SVM-come | Vane |
| 'I didn't come from Gbadzeme to Vane.' |  | (S11262 FY) |  |

ó-gàá dǒ j̀ jā̄ǹ

C1S.NEG-move:SVM move.out:LOC Vane
'He didn't go through Vane.'
(S11291 FY)

| $l \varepsilon$ | wó-dzi | kó́ | mani | me-a |
| :--- | :--- | :--- | :--- | :--- |
| and | 2S.NEG-buy | C5S:SVM | bring | 1S-Q |

'And you didn't buy it (cloth) for me?'
(conv Vida)

### 4.1.1.2 Habitual, progressive and intentive

In serial verb constructions in which the first verb is marked habitual, progressive or intentive, the second verb is preceded by $E$ or $I$, like with plural subjects in the aorist. The only difference is that in this case, it bears a high tone. Examples can be seen in (14)-(18). Examples (19) and (20) show that the serial verb marker can be left out, in which case the previous vowel is lengthened and bears a high tone. In (21) it can be seen that the same marker $E$ is also present in negated sentences in the intentive mood. Whether this is also the case for negative progressives and negative habituals still needs to be investigated.

| í-Zह̌-gà | òvāǹ̀ | $\bar{\varepsilon}$ | $z \bar{a}$ | lí-wī | kákā |
| :--- | :--- | :--- | :--- | :--- | :--- |
| C1S-HAB-move | Vane | SVM | pass | C3S-day | every |
| 'he always goes through Vane' |  |  |  |  |  |
| (S11291 FY) |  |  |  |  |  |

[^6](15) meszegtre ni babiakpaa
m $\check{\varepsilon} \varepsilon$-zā $\quad \dot{\varepsilon} \quad \operatorname{tr} \bar{\varepsilon}$ ní babiakpaa
1S.PROG-pass SVM go LOC Biakpa
'I am passing through to Biakpa' (S11271 DA)
(16) kā-dzò $\varepsilon-\bar{a}$ kee-prudu í bā yà

C6S-bird-DEF C6S.PROG-fly SVM come here
'the bird is flying (to) here'
(S11111 FY)
(17) ā-tá-dò é zā

C1S-INT-move.out SVM pass
'he is about to go out'
(S11111 FY)
(18) $\grave{\varepsilon}$ égémū lîtōlè
è é-gà é mū li-to-le
C1S.PROG-move SVM ascend C3S-mountain-DEF
'He is walking up the mountain.'
(S11111 FY)

غ̀é-gaá klànó o-nipo-lo me
C1S.PROG-move:SVM move.around:LOC C2S-river-DEF inside
'It is moving around in the river'
(RS09231_RW SO)
(20) i-ze-do svanว̀ó zāá trēé gbadzeme

C1S-HAB-move.from:LOC Vane:SVM pass:SVM go:LOC Gbadzeme 'he always goes from Vane to Gbadzeme' (S11263 MM)

| mo-ta-do | svano | $\varepsilon$ | tre | babiakpaa |
| :--- | :--- | :--- | :--- | :--- |
| 1S.NEG-INT-move.from | Vane | SVM | go:LOC | Biakpa |
| 'I won't be going from Vane to Biakpa' |  | (S11271 DA) |  |  |

As with the other $E / I$ serial verb marker discussed in the previous section, it is not clear whether this marker is a prefix to the second verb or a particle which is attached to the previous word. A possible indication of its status as a clitic to the previous word is example (16) above, in which the consultant paused in between the serial verb marker $i$ and the verb $b \bar{a}$. Also interesting is that one of my consultants who was very good at transcribing Avatime texts consistently connected these serial verb markers to the previous word when writing. Another indication of their status as clitics to the previous word is example (17), in which the marker does not harmonise with the second verb. I have encountered several similar cases (all involving the verb $z \bar{a}$ as the second verb). As I mentioned in the previous section, the vowel height assimilation of this serial verb marker to the previous vowel also points to its attachment to the previous word rather than to the second verb. On the other hand, in example (18) the marker does seem to harmonize with the second verb. I have one other example of this. Another indication that the marker is a prefix could be example (15), which, when she
repeated it slowly, my consultant pronounced with overt $a$ in $z \bar{a}$ and a small pause between $z \bar{a}$ and $\varepsilon$. Altogether, more research is needed to find out what the status of these serial verb markers is.

### 4.1.2.3 Potential

In the potential mood the second and subsequent verbs of an SVC are marked by the prefix $\bar{O}$. This can be seen in examples (22), (23) and (24). Often when this $\bar{O}$ - is preceded by a front vowel, the two vowels coalesce and form $u(24)$. It is also possible to leave out the prefix and lengthen the previous vowel, which can be seen in example $(25)^{8}$. When the previous vowel is $a$, the prefix $\bar{O}$ - is never realized and the $a$ is lengthened (26). This is also true for other serial verb markers with the form $o$ or $\Omega$, which occur in the aorist second person singular and negative aorist (see Section 4.1.1.1).
(22) kíà-sē $\bar{\jmath}$-s $\bar{\varepsilon}$

1P.POT-run SVM-leave
'We will run away.'
(S11271 DA)
(23) máà-gà j̀vāns ō-dò kīvò

1S.POT-move Vane SVM-move.out tomorrow
'I will go through Vane tomorrow.'
(S11291 FY)
(24) máàdzūūbā
máà-dzi o-ba
1S.POT-return SVM-come
'I will come back.'
(S11252 MA)
(25) maadzii $b a$

1S.POT-return:SVM come
'I will come back.'
(S11252 MA)

| áà-gaā | dǒ | j̀vāǹ̀ | kīvò |
| :--- | :--- | :--- | :--- |
| C1S.POT-move:SVM | move.out:LOC | Vane | tomorrow |
| 'He will go through Vane tomorrow.' |  | (S11291 FY) |  |

### 4.1.1.4 Temporal properties of serial verb constructions

So far we have seen that second and subsequent verbs in serial verb constructions are marked in different ways, depending on the aspect/mood, and also on the age of the speaker. A question that remains is whether these different ways of marking reflect different underlying structures. This question falls outside the scope of this thesis and has to remain unanswered for now.

[^7]Another question that one could ask about these constructions is whether they have the Macro Event Property (MEP), as described by Bohnemeyer et al. (2007). Constructions with the MEP are defined by the inability of different temporal operators to occur with different subevents. A temporal operator modifying a macro-event expression has scope over all subevents. Bohnemeyer et al. (2007) show that the MEP can capture certain similarities across languages better than traditional notions such as clausehood and VP. They focus on path expressions and show that languages fall into three groups when looking at the number and type of path expressions that can occur within one macro-event expression. I will come back to this in Section 4.3, but here I will try to establish whether serial verb constructions have the MEP or not.

Looking at the way Avatime speakers translate serial verb constructions, these constructions seem to have the MEP, as they are almost always translated to English constructions with the MEP. For instance the verbs in (27) are translated as 'lead to' rather than 'lead (and) take to'. Bohnemeyer et al. (2007) show that English VPs have the MEP, which can be seen in this example by the impossibility of conceiving of parts of the English sentence as occurring at different times (eg., *you are led on Monday to the house of your husband on Tuesday).

| (27) | ko | be-gbani | wo | $\varepsilon$ | tsins | ke-nyime-pe-a | ks |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| then | C1P-lead | 2 S | SVM | take.to | C6S-man-house-DEF | TOP |  |

'Then you are led to the house of your husband.' (ablabe YD_AD)

Of course, the translation is not a reliable indicator of semantic and syntactic properties of the original sentence. A better way to determine whether these constructions have the MEP is to determine whether each individual verb can occur with its own time adverbial. Unfortunately I did not investigate this systematically, but I do have a few relevant examples. Consider examples (28) and (29). Example (28) shows that it is possible for time adverbials to occur in between two verbs in a serial verb construction. Thus, the ungrammaticality of (29), in which a second time adverbial is added at the end, can only be due to the impossibility of modifying the two individual verbs of an SVC with two different temporal modifiers. This seems to be a good indication that serial verb constructions have the MEP.

| mó-d̄ | $g b a ̀ d z \bar{\varepsilon} m e ̀ ~$ | $k i ̄ v o \bar{e}$ | óbā | òvānò |
| :--- | :--- | :--- | :--- | :--- |
| 1S.NEG-move.from:LOC | Gbadzeme | yesterday | SVM-come | Vane |
| 'I didn't come from Gbadzeme to Vane yesterday.' | (S11262 FY) |  |  |  |

(29) ${ }^{*} m o ́-d \check{o} \quad$ gbàdzēmè $\quad$ kīvòè $\quad$ ó-bā $\quad$ j̀vānò òmōnò

1S.NEG-move.from:LOC Gbadzeme yesterday SVM-come Vane today
(S11262 FY)

However, a completely contradictory example is (30), produced by another consultant. I cannot think of any explanation as to how this sentence can be possible if serial verb constructions have the MEP.
(30) ma-ga babiakpaa kivoe a-tre ni ofuyeme omono

1S-move Biakpa yesterday SVM-go LOC Fume today 'I went through Biakpa yesterday and reached Fume today.' (S11271 DA)

As the judgements in (29) and (30) contradict each other and were both only tested with one speaker, it is not possible to draw any conclusions here. More research, involving more different speakers, is necessary to check the grammaticality of these and similar examples. Thus, that serial verb constructions have the MEP will remain a hypothesis for now. Some more evidence to support this hypothesis, based on observations other than the behaviour of temporal modifiers, will be shown in Section 4.3.

### 4.1.2 Consecutive constructions

As I explained in the previous section, serial verb marking can be left out. Sometimes when this happens there is still some form of marking, because the vowel preceding the second verb is lengthened. But in other cases there is no lengthening and the second verb is left unmarked, as in (31) and (32).


These constructions still seem to be serial verb constructions, but they now appear identical to another type of construction which I will call consecutive construction. Consecutive constructions also consists of a fully marked first verb followed by unmarked subsequent verbs, but they have some properties by which they differ from serial verb constructions. The first of these that consecutive constructions clearly do not have the MEP. The grammaticality of (33) and (34) shows that when there is no serial verb marking, the separate verbs can be marked with different time adverbials. When comparing (32) to (33), a clear difference can be seen in the interpretations as shown by the translations. It thus seems that the modification with two temporal operators in (33) forces this construction to be interpreted as a consecutive construction, whereas the most natural way of interpreting (32) is as a serial verb construction. My data contains several more examples, produced by different speakers, in which consecutive constructions contain two different time adverbials.
mè-sē kīvòē mū lī̄tō-lè ò òmōnò
1S-run yesterday ascend C3S-mountain-DEF today
'I ran away yesterday and climbed the mountain today.' (S11262 FY)

```
ma-se ige kivoe tre amedzofe omono
1S-leave:LOC Accra yesterday go:LOC Amedzofe today
'I left Accra yesterday and went to Amedzofe today.' (S11263 MM)
```

A second observation is that consecutive constructions can include more verbs than serial verb constructions. This is illustrated by (35), which contains four verbs. The maximum number of verbs that I encountered in serial verb constructions is three. Example (35) also shows that it is possible to pause for quite a long time in between the different verb phrases (pauses are indicated by '...'). It is my impression that speakers pause more easily and more frequently within these consecutive constructions than within serial verb constructions, although I did not investigate this. It would fit in with Givon's (1991) finding that, in four Papuan languages, the frequency of pauses within a construction corresponds to the tightness of the construction. In this light, consecutive constructions could be said to be less tight than serial verb constructions, which would correspond very well to the observation that SVCs likely have the MEP while consecutive constructions do not.

| a-se |  | ke-pe-a |  | $m \varepsilon$ | $\ldots$ | $m u$ | li-to-le |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| C1S-leave:LOC | C6S-house-DEF | inside | $\ldots$ | ascend | C3S-mountain-DEF |  |  |
| $\ldots$ | gà | o-se-lo | su | $\ldots$ | tre | solsme |  |
| $\ldots$ | move | C2S-tree-DEF | near | $\ldots$ | go:LOC | church |  |

'He left the house, climbed the mountain, passed the tree and went to the church.' / 'He went from the house upwards onto the mountain past the tree to the church.'
(S11202 FY)

Some more evidence that consecutive constructions are different from serial verb constructions will be shown in Section 4.3, when the possibilities of expressing complex path using these two kinds of constructions are examined. Still, more research is needed to ascertain that consecutive constructions differ from serial verb constructions in general and from serial verb constructions without serial verb marking in particular. In my corpus of natural speech, multi verb constructions without serial verb marking do occur, but none of these show the properties mentioned above, so it is not possible to establish whether they are serial verb constructions or consecutive constructions. To keep things simple, I will treat these constructions as serial verb constructions in this thesis.

### 4.2 Combining manner and path

### 4.2.1 The combination of manner and path in Avatime

### 4.2.1.1 Lexicalisation pattern

In the literature on the description of motion events, the kinds of constructions that are discussed most frequently are constructions in which manner of motion and path of motion are combined. As I pointed out in Chapter 1, three types of language are usually recognised: verb-framed languages (V-languages, path of motion expressed in the main verb and manner in an adverbial), satellite-framed languages (S-languages, path of motion expressed in a satellite and manner in the main verb) and equipollently framed languages (manner and path are both expressed in equal elements in the clause). Avatime expresses both manner and path in verbs and when combining manner and path usually uses a serial verb construction. This means it has a serialising lexicalisation pattern which is a subtype of equipollently framing. Some examples can be seen in (36) - (39).

| lị-tsittsàwē-le | lì̀-prur(u) | Í | $z \bar{a}$ |
| :--- | :--- | :--- | :--- |
| C3S-butterfly-DEF | C3S.PROG-fly | SVM | pass |

'The butterfly is flying past.'
(S11111 FY)

| le | ka-drui-a | po | ke-se | ku | ni | li-kla-ne | ese |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| and | C6S-dog-DEF | TOP | C6S-run | arrive | LOC | C3S-stone-DEF | under |
| 'And as for the dog, it ran under the stone.' |  | (frog DA) |  |  |  |  |  |


| $\varepsilon \varepsilon$-kosí | $t s a$ | $k u-d e-o$ |
| :--- | :--- | :--- |
| C1S.PROG-hurry:SVM | cross | C5S-road-DEF |
| 'She |  |  |

'She is hurrying across the road.'
(S11122 DA)

| mè-s $\bar{e}$ | è-mū | trḡé | àmèdzòfē |
| :--- | :--- | :--- | :--- |
| 1S-move.fast | SVM-ascend | go:LOC | Amedzofe |
| 'I ran up to Amedzofe.' |  |  |  |

(S11291 FY)

As the examples show, manner always precedes path in these constructions. Path can be expressed by a path verb only as in (36) or by a path verb and ground phrase as in (37) and (38). The ground phrase usually follows the path verb, as in single verb constructions. There is no boundary-crossing constraint in Avatime, as there is in some V-languages and in SerboCroatian. This is shown by (37) and (38), in which manner verbs are combined with boundary-crossing path expressions. Multiple paths can be combined with one manner verb, as can be seen in (39). This does not happen frequently though and I only came upon examples like this in elicitation sessions, not in spontaneous speech.

Apart from serial verb constructions, constructions with multiple clauses can also be used to combine manner and path, although this does not happen frequently. The two clauses can be
coordinated without any marker, as in (40), or the particles gì (complementizer) (41) and xé 'when/then' (42) are used. I only collected about 10 manner-path combinations in which these particles are used. They mostly indicate the direction (away from, towards or past deictic centre) in which the motion takes place, as is the case in both (41) and (42).
(40) $o$-le-lo $\varepsilon \varepsilon$-ga ke-trě ku-ni-o me C2S-crocodile-DEF C2S.PROG-move C2S.PROG-go:LOC C5S-water-DEF inside 'The crocodile is walking (and) going to the water.' (RS09231_RW SO)

```
\varepsiloǹ\varepsilońgà blèwùù gì \grave{\varepsilon}\varepsilon\mathrm{ -trघ}
C1S.PROG-move slowly COMP C1S.PROG-go
'She is walking slowly and going.' (RS09221_SM SO)
```

| es-ga | $n i$ | kusuds | me | xe | es-tre | $x e$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| C1S.PROG-move LOC | pride | inside | when | C1S.PROG-go | when |  |
| a-ze-tsani $\quad y \varepsilon$-dze |  |  |  |  |  |  |
| C1S-IT-meet | C1S-woman |  |  |  |  |  |
| 'He is walking proudly (and going) when he met his wife.' (S11121_SM FY) |  |  |  |  |  |  |

As several authors (Talmy, 1985; Slobin, 2004; Beavers, Levin and Tham, 2008) have emphasised, languages often have different ways of lexicalising motion, but one way is usually preferred. This preferred lexicalisation pattern is what determines the place of a language in the motion typology. As serial verb constructions are clearly preferred over multi clausal constructions in Avatime, these latter constructions do not contradict the fact that Avatime is an equipollently framed language.

### 4.2.1.2 Boundary-crossing use of za

In serial verb constructions, the verb $z \bar{a}$ 'pass' can be used to indicate boundary crossing. When $z \bar{a}$ is used in this sense, it follows the ground phrase instead of preceding it (43). This final $z a \bar{a}$ does not only occur in manner-path constructions; the first verb can also be another path verb. The verb $d \overline{\bar{\sigma}}$ 'land' is often used as the first verb in these constructions in which case there is a general 'cross' meaning (44). Another verb which can be used as a first verb is the general verb gà 'move’ (45).

## (43) bèz-yò bāgljāáa zā <br> C1P-jump each.other:SVM pass <br> 'They are jumping over each other.'

(RS09223_SM SO)
$\begin{array}{llll}\text { (44) } & m a ̀-d \bar{y} & k \bar{u}-d e-\bar{o} & \bar{a}-z \bar{a} \\ & \text { 1S-land } & \text { C5S-road-DEF } & \text { SVM-pass } \\ & \text { 'I }\end{array}$
'I crossed the road.'
(S11111 FY)


The constructions in (43) - (45) look like argument sharing serial verb constructions, in which the ground argument is in fact the argument of both verbs but is only realised once. However, as we have seen in Chapter 3, the verbs ȳ̄ 'jump' and wlò 'bathe, swim', do not take ground arguments. This seems to indicate that the ground arguments in these constructions are preposed arguments of $z \bar{a}$. However, as $d \bar{\jmath}$ and gà do take ground arguments, it could be that in examples (44) and (45) the ground phrases are shared arguments or even arguments of the first verb. An unexpected feature of the ground arguments in these constructions is that they are not locative phrases. Ground arguments occurring with $z \bar{a}$ are always locative phrases, and the same seems to be true for $d \overline{5}$. So at least in examples (43) and (44), in which neither of the verbs usually takes a ground argument as direct object, we would have expected a locative ground argument. Thus it seems that this construction comes with its own argument structure: verb X zā takes a direct object (occurring after the first verb) which is a medium or landmark, interpreted as a boundary that is crossed.

### 4.2.1.3 The manner slot

The manner slot of an Avatime manner-path construction, that is, the position of first verb, is not restricted to manner of motion verbs only. One of the verbs that can also occur in this slot is the general verb gà 'move'. In (46), gà is used as a manner verb, to indicate an unspecified manner of motion which in this case is walking. The verb gà can also be combined with a modifier to indicate manner of motion (47). Example (48) shows that gà can be used in the path slot as well.

| $x e ́$ | $w \bar{o}-g a ̀ \quad m u \bar{a}-\bar{\imath}$ |  |
| :--- | :--- | :--- |
| when | $2 S$-move | ascend-CM |
| 'when you walk upwards' |  |  |

(RS09221_dir_cath.church SO)

$$
\begin{array}{lllll}
-n u v จ-\varepsilon & \varepsilon \varepsilon-g a & g b a ̀ d a ̄ g b a ̀ d a ̄ & k u n i & y \varepsilon-k a  \tag{47}\\
\text { C1S-child-DEF } & \text { C1S.PROG-move staggering } & \text { follow } & \text { C1S-father } & \text { C5S-back } \\
\text { 'The child is walking staggeringly after his father.' } & \text { (S11121_SM FY) }
\end{array}
$$

$\bar{e}-s \bar{e} \quad g a ̀ \quad b \bar{a}-n \grave{j}-\bar{a} \quad k u ̀-S \overline{1}$
C1S-run move C1P-person-DEF C5S-middle
'He ran between the people.'
(RS09223_SM SO)

The manner slot can also be filled by a verb which lexicalizes both manner and path. The manner-path verb woli 'fall' occurs frequently in my data as the first verb of a serial verb construction, but never as the second verb. An example can be seen in (49). It is also possible to fill the manner slot with a non-motion verb (phrase) (50).
ké-Wól̄̄ gà fēsrè mè

C6S-fall move window inside
'It fell through the window.'
(frog DA)

| bee-me | kokokle klans | li-wl-le | me |
| :--- | ---: | :--- | :--- |
| C1P.PROG-sound | trumpet move.around | C3S-ceremony-DEF | inside |
| 'They are trumpeting around the ceremony.' |  | (S11121_SM FY) |  |

### 4.2.2 Comparison to other languages

As I explained in Chapter 1, Slobin (1997a) notes some differences in narrative style between V-languages and S-languages. One of these is that in V-languages, manner-path constructions are not used much, as these are often complex and difficult to process. In S-languages they are used more frequently, as manner and path can be combined in more simple structures. But what about equipollently framed languages like Avatime? Slobin (2004:227) claims that manner-path constructions in the equipollently framed language Mandarin are "highly frequent and are probably easy to process." In Avatime only 71 out of the 572 motion expressions that occur in stories, conversations and route descriptions are manner-path SVCs (see Table 4.1 below). Therefore, I would hesitate to call these constructions highly frequent. However, for various reasons it is difficult to compare my Avatime data to the data on other languages found in the literature. Reasoning like Slobin, I would think that in Avatime, manner-path constructions are used less frequently than in S-languages, because, like in Vlanguages, path-only constructions are already complete and an extra verb needs to be added to express manner. But whether serial verb constructions are easier or less easy to process than manner-path constructions in V-languages is difficult to predict and needs to be investigated independently from language use. Table 4.1 gives an overview of the frequencies of the different constructions in my corpus of motion expressions that occur in stories, conversations and route descriptions.

Table 4.1. Frequencies of motion constructions in natural speech.

| basic $g$ à 'move' only | 113 |
| :--- | :--- |
| path only | 279 |
| manner only | 39 |
| SVC: manner + path | 71 |
| SVC: path + path (+ path, once) | 49 |
| SVC: direction change (turn/branch) + path | 31 |
| total | 572 |

When comparing manner-path constructions in Avatime to those of other serialising languages, some differences can be observed regarding the number and type of motion verbs that a serial verb construction can contain. Zlatev and Yangklang (2004) note that in Thai it is possible to put a large number of path verbs in series with a manner verb, as they show with example (51). In Mandarin Chinese, on the other hand, maximally three motion verbs can be
combined in a serial verb construction: one manner verb, one path verb and one deictic verb (Chen and Guo, 2009). As I showed in example (39), it is possible in Avatime to use more than one path verb in combination with a manner verb. Example (52) shows that it is even possible to combine three path verbs with a manner verb, although, as there is no marking on the second and subsequent verbs in this construction, it is not clear whether this is a serial verb construction or a consecutive construction or a combination of both. In any case, constructions like this do not occur at all in the spontaneous speech I recorded. So when looking at actual usage, Avatime manner-path constructions seem to be restricted to one manner verb and one path verb.
(51) chán dəən won klàp jóon khâW paj

I walk circle return reverse enter go
'I am walking in a circle, returning back inside.' (Zlatev and Yangklang, 2004: 166)

| e-se ga $\quad$ svañ | dó | dzolokpuita | tre | amedzofe |
| :--- | :--- | :--- | :--- | :--- |
| C1S-run move | Vane | move.from:LOC | Dzolokpuita | go:LOC Amedzofe |
| 'He ran through Vane from Dzolokpuita to Amedzofe.' | (S11202 FY) |  |  |  |

When looking at it from this perspective, the difference between Avatime and Mandarin is that in Mandarin a deictic verb can be added to a manner-path construction, resulting in constructions with three verbs, whereas only two verbs are allowed in the Avatime SVCs. Thai motion constructions often contain a deictic verb as well, which also occurs as the final verb of the series. In Avatime there is no separate slot for deictic verbs in motion constructions. For Mandarin, Chen and Guo (2009:12) argue that deictic verbs should be treated as "neutral verbs", the meaning of which is "primarily focused on the directional relationship with the speaker". In Avatime, this is not how the deictic verbs are used. Out of 56 serial verb constructions with $\operatorname{tr} \bar{\varepsilon}^{‘}$ go' as the second verb ${ }^{9}, 41$ had a goal argument following $\operatorname{tr} \bar{\varepsilon}$. In other words, in the majority of cases $\operatorname{tr} \bar{\varepsilon}$ is used as a goal indicating path verb. It still indicates deixis, but this is not its most important function in these constructions. The verb $b \bar{a}$ has a stronger deictic interpretation, but it is still used together with a goal argument 9 times out of the 17 times it occurs as the second verb of a serial verb construction (see Section 3.1.1 for a more detailed discussion of deictic verbs). Thus, Avatime deictic verbs do not have a function that is categorically different from that of other path verbs and do not occur in a separate slot in serial verb constructions. A possibly related observation is that Avatime has directional prefixes bá- 'ventive’ and zě-- ‘itive’ (see Section 2.3.2) which seem to serve the function that final directional verbs serve in Thai and Mandarin.

Another difference between Thai and Avatime concerns verbs that encode both manner and path and the order of elements in serial verb constructions. In Thai there is a large class of verbs that encode both manner and path (Zlatev and Yangklang, 2004). Semantically, the only such verbs that I could find in Avatime are w̄̄lı̀ 'fall' and nyrò 'sink'. As I mentioned above,

[^8]these verbs behave like other manner verbs in the language and occur in the manner slot. In Thai on the other hand, manner-path verbs follow manner verbs and precede path verbs. Thus in Thai, as opposed to Avatime, manner-path verbs do not only form a semantic group but also a syntactic group. Interestingly, there are two verbs in Avatime which do occur in the position where Thai manner-path verbs occur. These are $m \bar{u}$ 'ascend' and $p l \bar{e} ‘ d e s c e n d '$. These verbs follow manner verbs (53) and precede path verbs (54). An example of manner verb $+m \bar{u}+$ path verb was shown in (39), repeated here as (55). So in Avatime, direction on the vertical plane seems to be treated separately from path indications on the horizontal plane.

| bol-ye | $\overline{\text { en}}$-mlì | ple | lì-tō-lè |
| :--- | :--- | :--- | :--- |
| ball-DEF | C1S-roll | descend | C3S-mountain-DEF |

'The ball rolled down the hill'
(S11111 FY)
mè-mú sé j̀vānò trāé àmèdzòfē
1S-ascend:SVM leave:LOC Vane go:LOC Amedzofe 'I went from Vane up to Amedzofe.'
(S11291 FY)
mè-sē è-mū trēé àmèdzòfé
1S-move.fast SVM-ascend go:LOC Amedzofe
'I ran up to Amedzofe.'
(S11291 FY)

Thus, even though Avatime, Mandarin and Thai all have a serialising lexicalisation pattern, there are differences between the languages in the use and form of manner-path constructions.

### 4.3 Combining path elements

### 4.3.1 Ways of combining path elements in Avatime

When a long journey, containing many different path elements is described, it has to be broken down in some way. In Avatime, when describing a route in a duplo landscape, people tend to produce a different clause for each stage of the journey, that is for each landmark or obstacle on the way. Serial verb constructions were only used in these tasks when several verbs were necessary to describe one such stage, as can be seen in (56)c below. The different clauses are usually connected with the particle $l \check{\varepsilon}$ 'and, then', but other particles such as xé 'when, then' (see (56)g) are also possible.
a. mē-kpēsē ní níyà gì ē-kpēsē yélò-è 1S-start LOC here COMP C1S-start yellow-CM 'I started here where it starts yellow'
b. ľ̌ mā-gà bī-do ह́-tō pwa sị bridge sisami ese-e and 1 S -move C 4 P -thing C 4 P -some like COMP bridge small under-CM 'and I walked under something that is like a small bridge'
c. $1 \check{\varepsilon}$ mē-mù gà bī-dj̀ wòw̄̄-ye āba- $\varepsilon$
and 1 S -ascend move C 4 P -thing green-DEF on-CM 'and I went over the green thing'
d. ľ̌ mè-kú ní $\ddagger w a$ sí independence arch-yè ēse-e and $1 S$-arrive LOC like COMP independence arch-DEF under-CM 'and I arrived under what is like the independence arch'
e. $l \check{\varepsilon}$ mā-klànj̀- $\bar{\varepsilon}-\varepsilon$
and 1S-move.around-C1S-CM
'and I went around it'
(...)
f. ľ̌ mè-kū kè̀-pe-à mì (ní)yà tē te and 1S-arrive C6S-house-DEF inside here like.this like.this 'and I arrived in this house'
g. xé máà-trē ní corner g $\bar{\varepsilon} g \bar{\jmath} \bar{\varepsilon}$ mè when 1S.POT-go LOC corner different inside 'when I went to the last corner'
h. lě mē-dò ní yellow bī-dò-me ābā
and 1S-emerge LOC yellow C4P-thing-DEF on 'then I came to the yellow thing.'

Even with shorter complex journeys, e.g., journeys that contain only a source, one landmark and a goal, the path verbs are usually distributed over different clauses. This can be seen in (57). The first clause describes the 'leaving', the next clause, which is connected to the previous clause without a particle, describes the 'crossing' and finally, a connective particle is added to introduce the last clause which describes the 'arriving'.

| a-SE | dono | $n i$ | ke-pe-a | $m \varepsilon$ | a-tsa | o-nipo-lo |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| C1S-leave move.from | LOC | C6S-house-DEF | inside | C1S-cross | C2S-river-DEF |  |
| $l \varepsilon$ | a-tre | soleme |  |  |  |  |
| and | C1S-go:LOC | church |  |  |  |  |

'She went from home across the river to the church.' (S11261 SN)

In the descriptions of journeys like this, with a source, a goal and one or a few landmarks in between, it is also possible to use consecutive constructions, as described in Section 4.1.2. This does not seem to be the most natural way, but it was accepted and spontaneously used by several speakers in elicitation sessions, and used a few times in descriptions of videos or demonstrations. Examples can be seen in (58) and (59).

| a-do | ke-pe-a |  | $m \varepsilon$ | $g a ̀ ~$ | $o-s e-l o$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| C1S-move.from C6S-house-DEF | inside move | C2S-tree-DEF | near |  |  |
| tsa | o-nipo-lo | tre | soleme |  |  |
| cross | C2S-river-DEF | go:LOC | church |  |  |

'She went from home past the tree across the river to the church.'(S11201 FY)

| ma-se | suano | ya | tre | ni | amedzofe za | tre ni | gbadzeme |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1S-leave | Vane | here | go | LOC | Amedzofe pass | go LOC | Gbadzeme |
| 'I went from Vane through Amedzofe to Gbadzeme.' | $(\mathrm{S} 11263 \mathrm{MM})$ |  |  |  |  |  |  |

These examples tie in with the earlier observation (Section 4.1.2) that consecutive constructions do not have the Macro Event Property. Bohnemeyer et al. (2007) found that constructions with the MEP can maximally consist of departure, arrival and passing (their 'passing' includes crossing). Example (58) shows that two different passing events are possible within consecutive constructions, and in (59) two arrival events are expressed. In examples (60) and (61) below some more properties of these constructions with regard to possible arguments are shown. Example (60) shows that two departure events are not easily combined in these constructions. The verb $d \bar{\jmath}$ 'move from' cannot be used twice in a row and neither can the verb $s \grave{\varepsilon}$ 'leave'. It is possible to use the verbs $s \grave{\varepsilon}$ and $d \bar{\rho}$ in a row, each with its own argument, as can be seen in (60). However, these should perhaps not be seen as indicating two departure events. The verb $s \grave{\varepsilon}$ 'leave' foregrounds motion and indicates the leaving of the fence, which is the most important part of this motion event. The verb $d \overline{\bar{\rho}}$ specifies the exact source, which is the house. Example (61) shows that it is somewhat unnatural to use two instances of the verb gà 'move (through)' in the same construction. However, my consultant did say that this was possible, even though he also suggested (61) as a better way to describe the situation. So all in all, even though consecutive constructions do not have the MEP, there is not as much freedom to add any path element to the construction as there is when combining full clauses.
a. *ase ke-pe-a me se ku-ka-a me tre soleme
C1S-leave C6S-house-DEF in leave C5S-fence-DEF in go:LOC church
b. *ado ke-pe-a me do ku-ka-a me
C1S-move.from C6S-house-DEF inside move.from C5S-fence-DEF inside
tre soleme
go:LOC church
c. a-se ku-ka-a me do ke-pe-a me
C1S-leave C5S-fence-DEF inside move.from C6S-house-DEF inside
tre soleme
go:LOC church
'He left the fence moving from the house to the church.' (situation: house is within
fence, church is outside fence, figure moves from house to church) (S11202 FY)

b. a-se ke-pe-a me gà o-se-lo sul C1S-leave C6S-house-DEF inside move C2S-tree-DEF near

| le | a-gà | o-nipe-lo | sul | tre | soleme |
| :--- | :--- | :--- | :--- | :--- | :--- |
| and | C1S-move | C2S-river-DEF | near | go:LOC | church |

'I went from home past the tree and went along the river to the church.'
(S11201 FY)

In these consecutive constructions the verbs occur in the order in which the sub-events they denote happen. As (62) shows, it is not possible to use the goal-anchored verb tré 'go' as the first verb and the source-anchored verb dò 'move out' as second verb. There are some exceptions to this generalization though. The verb $d \overline{5}$ 'move from' can follow goal-anchored verbs and route-denoting verbs, as can be seen in (63).

$$
\begin{equation*}
 \tag{62}
\end{equation*}
$$ (S11201 FY)

| $\grave{\varepsilon} \dot{\varepsilon}-$-tr | oholo d̄̄́ | svano |
| :--- | :--- | :--- |
| C1S.PROG-go:LOC | Ho move.from:LOC | Vane |
| 'He is going to Ho from Vane.' |  |  |

The fact that $d \overline{\bar{\sigma}}$ 'move from' can follow goal-phrases, unlike the other source-anchored verbs $d \grave{o}$ 'move out' and $s \grave{\varepsilon}$ 'leave', could have to do with the emphasis it places on identifying the source. As I showed in Section 3.2, place (source) and not motion, is salient in the semantics of this verb, whereas motion is salient in the semantics of $s \grave{\varepsilon}$ 'leave'. When describing motion, one would want to do this in the order in which the different motion events happen, thus a source-indicating verb with a salient motion semantics should come first. Just indicating the source of motion without foregrounding motion however, can be done at any time. The verb dò seems to foreground boundary-crossing and is therefore also ruled out from occurring as a second verb. This explanation is mostly speculation though and something else might well turn out to be going on. Something that complicates the matter, is that I have one example of a verb other than $d \bar{\jmath}$ which does not keep to the sequential order principle, as can be seen in (64) below. Here the verb gà 'move' is used to denote a passing event, introducing 'the river' as a landmark. Still, it follows the verb phrase that indicates the goal of motion: tre soleme 'go to the church'. The verb gà, unlike $d \bar{\jmath}$, is not a verb that foregrounds place. So another explanation seems to be necessary. One possible explanation for all exceptions is that verbs which do not occur in sequential order are grammaticalised or grammaticalising as prepositions. Both $d \bar{\rho}$ and $g$ à are verbs that occur frequently as indicators of source and medium/landmark in multi verb constructions. It is well-known that verbs like this can grammaticalise as preposition-like elements. There might actually be some evidence for reduced verbal behavior of $d \overline{\bar{\rho}}$ in these constructions. As I explained in Chapter 2, in certain aspects and moods the tones of some verbs raise when they are followed by a high tone. The
verb $d \overline{\bar{\rho}}$ is one of those verbs. As it is almost always followed by the locative preposition ní, its tone almost always raises to high (also when ní is elided). This happens when it is the only verb in a clause, but also when it is the second verb in a serial verb construction. Interestingly, when $d \bar{\rho}$ is the unmarked second verb of a consecutive construction, its tone is never raised. This could point to grammaticalisation. However, as I do not know if tones normally raise on verbs in this position, this is still a hypothesis which needs to be confirmed by further research.

| (64) | a-tre | soleme | $d \bar{\square}$ | ní | ke-pe-a |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | C1S-go:LOC | church | move.from | LOC | C6S-house-DEF | inside | move |
|  | $o$-nipo-lo |  |  |  |  |  |  |
|  | C2S-river-DE | F near |  |  |  |  |  |
|  | 'He went to th | e church | from home | ong the river.' (S11201 FY) |  |  |  |

So far we have seen that complex paths are usually expressed by multi-clausal constructions, but can also be expressed in a consecutive construction. We have also seen that when combining clauses, almost anything can be combined freely, but in consecutive constructions there are restrictions on the type of path verbs that can be combined and the order in which they occur. There is one more method of combining path elements, which is using a serial verb construction. These constructions show the greatest restrictions. In my data, serial verb constructions only ever combine two ground arguments. These two arguments are usually source and goal (65) but I came across one example in which source and landmark were combined (66). Other combinations of path verbs are possible if one of the verbs does not take a ground argument. A combination of a landmark-indicating path verb (without ground argument) with a goal-anchored verb can be seen in (67). A combination of three path verbs could be seen in (20), repeated here as (68). It might be possible to add landmarks to these sentences (which would be the ground arguments of klàǹ̀ in (67) and zā in (68)). However, I did not test this and I do not have any examples in which this is the case. As in consecutive constructions, the order of the verbs reflects the order in which the sub-events occur.

| mèz-Š̌ | gbàdzēme | $\varepsilon$ | trě | òvānò |
| :--- | :--- | :--- | :--- | :--- |
| 1S-leave:LOC | Gbadzeme | SVM | go:LOC | Vane |

'I went from Gbadzeme to Vane'
(S11262 FY)


| ā-tá-klānó | tre | postoffice |
| :--- | :--- | :--- |
| C1S-INT-move.around:SVM | go:LOC | post.office |

'She will move around to the post office'
(S11272_CG MM)


This restrictive behaviour of marked SVCs with respect to number and type of verbs and arguments is an indication that these constructions have the Macro Event Property, as constructions with the MEP can maximally contain one departure, one passing and one arrival event (Bohnemeyer et al. 2007).

### 4.3.2 Theoretical implications

### 4.3.2.1 Properties of macro-event expressions

If, for now, we assume that Avatime serial verb constructions have the MEP, it would be nice to compare Avatime to Bohnemeyer et al.'s (2007) sample of languages. Bohnemeyer et al. found that the languages they studied can be put into three groups. The first group of languages can package departure, passing and arrival into a macro-event construction. Languages that behave like this are satellite framed languages like Dutch or serialising languages like Ewe. The second group of languages can also package all three subevents into a macro-event expression, but only if the passing event directly connects the source and goal. If this is not the case, a macro-event expression can only contain departure and arrival, and passing has to be expressed by a separate macro-event expression. All languages that Bohnemeyer et al. found to belong to this group are verb framed languages which have a way of expressing path functions. The third group of languages can only express one subevent in a macro-event expression, that is, either departure, arrival or passing. These are verb-framed languages which lack a way of referring to path functions and serialising languages which cannot combine departure and arrival in a serial verb construction with the MEP.

Avatime clearly does not belong to type 3 , as it can combine departure and arrival in its serial verb constructions. It is most likely of type 1 , as type 2 does not contain serialising languages in Bohnemeyer et al.'s sample and Ewe, which is related to Avatime, is also of type 1. If this is the case, it should be possible to add a landmark to constructions such as (68). This might very well be possible and needs to be tested. Bohnemeyer et al (2007: 514) also hypothesize that there "might be languages that have serial verb constructions integrating departure and arrival, but not passing subevents". Avatime could be such a language, although this is not very likely since it is possible to integrate departure and passing, as could be seen in (66). So it is likely that Avatime follows the expected pattern and belongs to type 1.

The findings of Bohnemeyer et al. are interesting, because they show differences in possibilities for expressing path that cut across the well-known lexicalisation types. When it comes to combining path elements, there are apparently two types of verb-framed languages, and there does not seem to be a separate category of serialising languages. Part of the serialising languages behave like satellite-framed languages and part of them behave like part of the verb-framed languages. But all of this is based on research into what is maximally
possible in the languages concerned. Slobin (1997a) found that even though it is possible in some verb framed languages to combine both a source and a goal argument with one verb, this is not done much in actual usage. He finds considerable differences in narrative style between verb-framed and satellite framed languages as far as the expression of complex path is concerned: "The combined effect of a lexicon of path-verbs along with a boundary-crossing constraint is a style in which most path segments are encoded by separate verbs with a limited number of ground nominals per verb. The result is a sort of "rhythm" that becomes a habit or a norm, setting a framework that goes beyond its core linguistic determinants." (Slobin, 1997a: 443). Slobin also notes that speakers of V-languages use fewer path elements than speakers of S-languages when describing the same scene. This effect of lexicalisation pattern goes well beyond what is possible in grammar, as it is very well possible in V-languages to use several clauses to express all path elements. Slobin hypothesises that this is not done because it slows down the narrative style and presents the image of a segmented path. It thus seems that Bohnemeyer et al.'s (2007) grouping of languages only reflects what is maximally possible in a languages and does not have consequences for narrative style. However, data from Basque suggests otherwise. Basque is one of the V-languages that can encode multiple path elements in a macro-event expression. Ibarretxe-Antuñano (2004) shows it to have a narrative style different from the typical V-language as described by Slobin. Basque frog stories include many path descriptions in which both source and goal of motion are mentioned. Slobin (2004) acknowledges this and uses it as an example to show that the individual morphological profiles of languages can overrule their verb-framed or satelliteframed behaviour. However, he might have missed a larger pattern of a group of V-languages that behave like this, instead of Basque being an individual exception.

### 4.3.2.2 Narrative style: number of path expressions and ground arguments

If Bohnemeyer et al.'s two groups indeed reflect language use in addition to possibilities, one would expect that some serialising languages behave like Slobin's V-languages and others like his S-languages. As Avatime seems to belong to type 1, patterning with S-languages, we would expect it to have an S-language-like narrative style. However, looking at Slobin's (1997a) description of the narrative style of V-languages quoted above, Avatime seems to behave like a V-language. Each path segment is encoded by a separate verb and only one ground nominal per verb is possible. The notion of separate verbs is probably not the best way to define narrative style though, it might be better to look at clauses or macro-event expressions. The question then is: how frequently are macro-event expressions containing multiple path and ground elements used in Avatime narrations? The perhaps surprising answer to this is: not at all. Even though Avatime, as we have seen, allows at least for the combination source + goal, in my corpus of spontaneous speech there are no serial verb constructions in which two ground elements are combined. The utterance that comes closest is (69) in which we could say that the implicit goal argument of $b \bar{a}$ 'come' is 'here', and so source and goal are combined. But it would still be only one example, out of a fairly large corpus of motion expressions found in stories. Combinations of several path elements with one or no ground elements do occur. There are 49 of those constructions within my corpus of 572 spontaneous motion expressions (see Table 4.1 in Section 4.2), which form 20 different
combinations. One of these constructions combines three path elements (70), the others only two.

| maa-do | li-we-le | me | $b a-\varepsilon$ |
| :--- | :--- | :--- | :--- |
| 1S.POT-move.from:LOC | C3S-celebration-DEF | inside | come-CM |
| 'when I come back from the celebration...' |  | (S10031_EK) |  |

(70) li-poe-le gi kpakpaxe á-s $\bar{\varepsilon} \quad$ a-tr(e) $\quad$ e-dzi $\quad$ ba $d z \varepsilon$ C3S-time-DEF COMP duck C1S-leave C1S-go SVM-return come again 'When the duck left, he came back again.' (duck SO)

Zlatev and Yangklang (2004) also notice an infrequent use of ground elements in Thai, another serialising language. They do not mention how often multiple ground elements are combined in one clause, but they did count the total number of ground elements as a proportion of the total number of clauses in the frog stories they collected. They compared this to the percentage of ground elements per verb in frog stories as calculated by Slobin (1997b) for English and Spanish and surprisingly found that it was much lower than both. Slobin found a rate of 0,82 ground elements per verb for English and 0,63 for Spanish, where Zlatev and Yangklang found 0,47 ground elements per clause for Thai. Again, this is not what would be expected, as in Thai, like in English, it is possible to combine multiple ground elements in one clause. Similar results are found for Mandarin by Chen and Guo (2009: 15). Frog stories in this language contain 0,552 ground elements per clause. The Avatime number of ground elements per clause in frog stories is $75 / 134$ which is 0,56 . Again, this does not come close to the number for English, which it would be expected to resemble. The explanation for the low number of ground elements per clause in Thai offered by Zlatev and Yangklang (2004: 184) is the following: "since the Motion event is often so richly specified verbally, nominal Ground specification is often omitted since the information can be worked out from context." This is an interesting explanation, which could be valid for Avatime as well. However, to test whether this can really be the explanation, an indication of how many path indicating elements do not occur with a ground nominal in the different languages should be given. Zlatev and Yangklang do count the number of ground nominals per motion verb, which is 0,20 . This indicates that indeed a large number of motion verbs is used without ground nominal, but this figure includes manner verbs, which could not be used to replace ground nominals. In Avatime, the number of ground nominals per motion verb in frog stories $75 / 166$ which is 0,45 . This is a much higher figure than that of Thai, which could partly be due to a less frequent use of manner verbs in Avatime. The number of ground nominals per path verb in Avatime is $75 / 151$ which is 0,50 . To see if a larger number of path expressions without ground argument indeed makes up for the infrequent use of ground arguments in serialising languages, the proportion of ground nominals per path verb or satellite needs to be calculated for the different languages concerned.

To summarise, even though it is possible in Avatime to package multiple path and ground elements in a macro-event construction, this is not often done in spontaneous speech.

Constructions with multiple path elements do occur, but constructions with multiple ground elements do not occur at all. This finding fits in with findings for other serialising languages. S-languages use ground arguments much more frequently. An explanation for this could be that Avatime and other serialising languages use more path expressions without a ground argument than S -languages do, but it remains to be investigated whether this is the case.

### 4.3.2.3 Narrative style: elaboration of path

Another typology-related difference in narrative style that Slobin (1997a) notes is that in Vlanguages path is described less elaborately than in S-languages. In this case serialising languages seem to pattern with S-languages. Slobin's finding is based on a part of the frog story, where a boy ends up on top of a deer, which runs to the edge of a cliff, stops and throws the boy into the water. This motion trajectory is divided by Slobin into the following four components.

1. change of location: deer moves, runs, arrives at cliff
2. negative change of location: deer stops at cliff
3. cause change of location: deer throws boy, makes boy/dog fall
4. change of location: boy/dog fall into water

Slobin finds that speakers of S-languages on average mention three of these components in their stories, whereas speakers of V-languages mention only two. Ameka and Essegbey (2001) extended this research to two serialising languages, Sranan and Ewe. They found that all five Ewe consultants used at least three components and out of four Sranan speakers, only one mentioned two components, the rest mentioned at least three. Zlatev and Yangklang (2004) found that Thai also fits in this pattern. Out of 10 Thai frog stories, $80 \%$ of the narrators mentioned at least three components of the trajectory. So the possibility of using path verbs in series causes a finer segmentation of events in narratives. Thus in this respect, serialising languages resemble S -languages and not V-languages.

The results for Avatime fit in with this pattern very well. In fact, Avatime behaves very much like Ewe and Sranan as described by Ameka and Essegbey (2001). These authors notice that all Ewe speakers and three of the four Sranan speakers expressed components 1,3 and 4 . If a verb meaning 'stop' is the only way to express component 2 , none of them expressed this component. However, all Sranan and Ewe speakers used a word meaning 'arrive', which could also be seen as an instance of component 2 (even though Slobin included it in component 1). All four Avatime speakers expressed components 1 and 3. Like the Ewe and Sranan speakers, none of them use the verb 'stop' $t$. This could mean that none of them expressed component 2, but perhaps the two Avatime speakers who used nā 'arrive' could be counted as expressing component 2 . Three of the speakers specify component 4 , the falling into the hole or river. The speaker who does not mention the falling immediately, does describe the falling in a later stage. She misunderstood the story and thought that the boy was dropped on the ground after which the boy and the dog walked for a bit and fell into a hole. So minimally, one speaker specified two components (with the side note that she
misunderstood the story) and the others three. Maximally, if 'arriving' is counted as component 2 and the late mentioning of the falling by one of the speakers is counted as component 4 , two speakers specify three components and two other specify four. In either case, more path components are expressed than in V-languages. Two of the descriptions, the shortest one and one of the most elaborate ones, are shown below in examples (71) and (72).
a. o-nuvo-e $\quad$-tinịi ni klatse a-sia-na aba

C1S-child-DEF C1S-be.on LOC deer C3P-horn-DEF on
'The boy was on the antlers of the deer.'
b. klatse ee-se ni ka-drụi-a ka tsye ke-chase ye deer C1S.PROG-run and C6S-dog-DEF C6S too C6S-chase C1S 'The deer was running and the dog too was chasing it.'
c. klatse e-feke o-nuvo-e kpe ku-ko me deer C1S-lift C1S-boy-DEF put.in C5S-hole inside 'The deer lifted up the boy and put him into the hole.'
d. ka-drui-a tsye ke-woli ku ku-po me C6S-dog-DEF too C6S-fall enter:LOC C5S-valley inside 'The dog too fell into the valley.' (frog Ko)
a. $g i$ be-se be-tre rrr

COMP C1P-run C1P-go ID
'So when they went running'
b. gi be-na ku-po nu-i

COMP C1P-reach C5S-valley opening-CM
'when they reached the end (opening of a valley)'
c. felekadzeleke a-ti o-nivo- $\varepsilon$
deer C1S-take C2S-boy-DEF
'the deer dropped (took) the boy.'
d. ani kịle gi ka-drụi-a tsye kee-se (o)nu-i
and how COMP C6S-dog-DEF too C6S.PROG-run opening-CM
'And how the dog too was running (at the opening)'
e. ka tsye ke-ze-woli kuni o-nivo- $\varepsilon$ petee ni ku-po me C6S too C6S-IT-fall follow C2S-child-DEF all LOC C5S-valley inside 'it too went and fell (following the child) into the valley.'
$\begin{array}{lllllll}\text { f. } & \text { eteps } & \text { ku-po } & k o-l o & o-n i p o-l o & o-l i & n i \\ \text { meanwhile } & \text { C5S-valley } & \text { C5S-that } & \text { C2S-river-DEF } & \text { C2S-be.at } & \text { LOC } \\ k e-s e-a ~ & & \text { pwii } & & & \\ \text { C6S-ground-DEF } & \text { ID } & & & & \end{array}$
'Meanwhile, in that valley there is a river, there (on the ground) far away.'
g. be-woli ku ní ku-po me C1P-fall enter LOC C5S-valley inside 'They fell into the valley.'

So altogether Avatime behaves like other serialising languages and like satellite-framed languages in expressing path in much detail. This seems to be caused by the possibility to express multiple path elements in a tight (macro-event) construction, as Slobin hypothesised. Interestingly, this effect exists even though these tight multiple path constructions are not often used in the language.

### 4.4 Summary and discussion

In this chapter I have pointed out three different types of construction that are used for complex motion expressions. These are the following:

1. Conjoined clauses. Clauses can be conjoined with or without conjunction particles. 2. Serial verb constructions. Older people usually mark the second verb in these constructions with serial verb markers, whereas younger people usually lengthen the last vowel of the word preceding the second verb, or do not mark the second verb at all.
2. Consecutive constructions. These look like serial verb constructions without marking on the second verb, but have some different properties.

Consecutive constructions seem to be rare in the language and their status as constructions different from SVCs needs to be more firmly established. It also needs to be ascertained that there are SVCs without marking on the second verb that are not consecutive constructions.

I have shown that consecutive constructions do not have the Macro Event Property, as each verb can occur with its own time-denoting adverbial. Serial verb constructions do seem to have this property, although more research is needed to be sure about this. Consistent with Bohnemeyer et al's (2007) findings, consecutive constructions, which do not have the MEP, can contain more sub-events than just departure, arrival and passing, while serial verb constructions, which might have the MEP, cannot. In my data serial verb constructions can only combine departure and arrival or departure and passing, but combining all three might be a possibility too. This has to be checked in further research.

Serial verb constructions are the standard way to combine manner and path in Avatime. Thus, Avatime is an equipollently-framed language. Whereas Slobin (2004) seems to take the ease of processing and frequent occurrence of manner-path constructions in serialising languages for granted, I have pointed out that these properties have yet to be established for Avatime. An interesting difference between Avatime on the one hand and Mandarin and Thai on the other hand is the absence of a separate slot for deictic verbs in serial verb constructions. Another difference with Thai is that Avatime serial verb constructions do not have a separate slot for manner-path verbs. Avatime does seem to have a distinct position in serial verb constructions for the verbs of 'vertical movement' mū 'ascend' and plé 'descend'.

To express complex paths in Avatime, a different clause is often used for each verb.
Consecutive constructions and serial verb constructions are used as well for this purpose. In
consecutive constructions, many path verbs can be combined, although there are some restrictions. Within serial verb constructions, the maximum number of path verbs that can be combined seems to be three, but maximally two of these can occur with a ground argument. When looking at the narrative style of Avatime compared to that of V-languages, S-languages and other equipollently framed languages, Avatime patterns with the equipollently framed languages, as would be expected. Like these languages, it uses fewer ground arguments per motion clause than V-languages and S-languages. It also segments path descriptions finely, like other equipollently framed languages and S-languages, and unlike V-languages.

An interesting issue that I cannot explore further in this thesis is the relation between the groups of languages found by Bohnemeyer et al (2007), based on the number and type of subevents that can occur within a macro-event expression, and the narrative style of a language as described by Slobin (1997a). As I already pointed out, it seems that the two groups of Vlanguages found by Bohnemeyer et al. do have different narrative patterns. A remaining question is whether the different types of serialising languages also have different narrative styles. Bohnemeyer et al. show that serialising languages can be split into two groups. One group, to which Avatime most likely belongs, can express departure, arrival and passing in one macro-event expression. The other group can only express one of those sub-events per macro-event expression. It would be interesting to see if this group has a different narrative pattern with regard to segmentation of path than the languages like Avatime do.

As for Avatime, some more research definitely needs to be done to establish the exact syntactic properties of the different multi verb constructions. It could be useful to look into the prosodic properties of these constructions. These could point to a difference between serial verb constructions and consecutive constructions. More syntactic tests, such as extraction tests, could also be done to look for a difference. Another issue which needs resolving is the status of the serial verb markers. Only a few more examples, if rightly chosen, could make it clearer whether these are prefixes or something else. In this respect, it could also be interesting to look at other Avatime dialects, to find out if these can give a clue as to how these forms have developed. Non-motion serial verb constructions need to be taken into account as well. As a detailed description of the properties of serial verb constructions falls outside the scope of this thesis, these issues are left for further research.

## 5. Conclusion and discussion

### 5.1 Summary and conclusion

In this thesis I have investigated the expression of motion in Avatime. After an introduction and theoretical background in chapter 1 and a general description of Avatime grammar in chapter 2, I have looked into the semantics and use of motion verbs in chapter 3 and into complex motion expressions in chapter 4. I have placed all my findings about Avatime in a wider perspective by comparing them to findings for other languages and to typological generalisations. Here I will summarize my main findings based on the research questions that I posited in Chapter 1.

My first research question was 'how are motion events expressed in Avatime?'. I have found the following:
(i) Path of motion is lexicalised in verbs. There are no path satellites or prepositions. Each path verb can take one ground argument (source, landmark, medium, goal or just ground), which is expressed as the direct object of the verb or as a prepositional phrase. There are approximately 20 path verbs in Avatime.
(ii) Manner of motion is lexicalised in verbs. I mentioned approximately 12 of these in this thesis, but with more research, more manner verbs will likely be found. Manner of motion can be made more specific by manner ideophones, which are combined with a general motion verb or a manner verb.
(iii) A combination of manner and path of motion is usually expressed in a serial verb construction in which a manner verb and a path verb are combined. Manner verbs always precede path verbs in SVCs. It is also possible to use a combination of two clauses, one with a manner verb and one with a path verb, but these constructions are very infrequent.
(iv) Complex paths can also be expressed in serial verb constructions, but only two ground elements can be combined in this way and only one ground argument is ever used per clause in spontaneous speech. Not more than three path verbs can be combined in serial verb constructions and SVCs cannot contain more than one of the same kind of verb (departure, passing, arrival). Consecutive constructions can be used to combine more than three path verbs, more than two ground elements and more than one of the same kind of verb. These constructions were not used in spontaneous speech in my data. The preferred way of expressing complex paths is by using a separate clause for each path element.

My second research question is 'how do the lexicalisation of motion and the use of motion expressions in Avatime fit in the typology of motion lexicalisation?'. Within this typology, there are three categories (Talmy, 2000; Slobin, 2004): satellite-framed (manner is lexicalised in the main verb and path in a satellite), verb-framed (path is lexicalised in the main verb and
manner in a subordinate element) and equipollently framed (path and manner are lexicalised in equal categories).

Firstly, my research has established that Avatime can be classified as an equipollently framed language, as equal categories, in this case finite verbs in series, are used to express manner and path in combination. Within the category of equipollently framed languages, Avatime belongs to the class of serialising languages. The typological category of a language tends to correlate with (i) the saliency of manner, (ii) the packaging of multiple path and ground elements and (iii) the elaboration of path. I will proceed to discuss these properties for Avatime.
(i) The saliency of manner in a language is reflected in the number and type of manner verbs it possesses and the frequency with which manner expressions are used. Avatime has a small manner-verb lexicon which mainly consists of basic manner verbs (tier 1 verbs). It does not make frequent use of manner verbs, manner is only expressed when it needs to be foregrounded. This is unlike the pattern in S-languages and much like the pattern in Vlanguages. In this, it contrasts with two other serialising languages, Mandarin and Thai, which have large manner verb lexicons and use manner verbs frequently. Slobin (2004) claims that in serialising languages manner and path can be combined as easily as in S-languages, which is why manner-path constructions and thus manner verbs are used frequently. In Avatime, manner-path constructions do not seem to be highly frequent, but their frequency would need to be compared to data from S-languages and V-languages. In any case it does not seem that the saliency of manner in Avatime can be explained by its lexicalisation pattern in a straightforward way. Other factors that might be of influence are the size of the verb lexicon in general and the use of ideophones to express manner of motion.
(ii) The packaging of multiple path and ground elements also correlates with lexicalisation pattern. In S-languages the use of satellites to express path means that different path expressions can also easily be combined, with or without ground expressions. In V-languages, multiple path and ground elements cannot be combined easily, and even though this is sometimes possible, the preferred pattern is to use a separate clause for each path element. In Avatime, multiple paths and grounds can be expressed in tight constructions, as in Slanguages. This has been found for several other serialising languages as well (Bohnemeyer et al., 2007). Nevertheless combining path elements does not happen much in spontaneous speech in Avatime: in my data, multiple paths are sometimes combined, but different grounds are always distributed over different clauses, as in V-languages. Similar conclusions have been reached about two other serialising languages: Thai and Mandarin (Zlatev and Yangklang, 2004; Chen and Guo, 2009). Thus, there seems to be a discrepancy here between what is possible and what is actually used, at least in Avatime. Hence, unlike in V-languages and S-languages, the lexicalisation pattern of serialising languages cannot easily be extended to the way complex paths and multiple grounds are usually expressed.
(iii) The lexicalisation pattern of a language also seems to influence the elaboration of path in narratives. Even though speakers of V-languages have the possibility of using several clauses to describe a complex journey in detail, they do not elaborate on path as much as speakers of S-languages do. The fact that paths elements can be combined more easily in S-languages, apparently causes speakers of S-languages to pay more attention to the details of path in narratives. Serialising languages including Avatime pattern with S-languages in describing path in much detail. This is somewhat surprising as far as Avatime is concerned, because, even though it is possible to use serial verb constructions to express complex paths, it is more usual to use multiple clauses, like in V-languages. Thus, it is not the usual but the possible pattern that seems to determine the attention to path in narratives.

There are several other serialising languages of which the expression of motion has been described in some detail. I have already pointed out the main similarities between these languages and Avatime with regard to saliency of manner, packaging of path and ground elements and elaboration of path. In the domain of saliency of manner, Avatime seems to differ from the Asian languages Mandarin and Thai. It does resemble the closely related language Nyagbo in this respect (Essegbey, 2008). Whether other West-African serialising languages follow the pattern of Avatime or are more similar to the Asian languages remains to be investigated. There are some other interesting differences between Avatime and Mandarin and Thai with regard to the number and type of verbs that occur in serial verb constructions that express motion. Unlike the two Asian languages, Avatime does not have a separate slot in serial verb constructions for deictic verbs. Because of this extra slot, Mandarin motion SVCs often consist of three verbs (manner, path and deictic) whereas Avatime motion SVCs seem to be mostly restricted to two verbs. Thai is different from both these languages in allowing a large number of motion verbs in its SVCs. In all three languages, manner verbs precede path verbs in serial verb constructions. In Thai, verbs that lexicalise both manner and path occur after manner verbs and before path verbs. In Avatime these verbs behave like manner verbs in SVCs. There are two other verbs that occur after manner verbs and before path verbs, these are the two verbs that indicate vertical direction: $m \bar{u}$ 'ascend' and $p l \bar{e}$ 'descend'. No such behaviour has been noted for similar verbs in Thai or Mandarin.

Altogether, the close examination of Avatime motion expressions in this thesis has shed some more light on the position of equipollently framed, or more precisely serialising languages within the motion typology. It has been shown that there are several similarities between serialising languages of different language families and areas, which supports the notion of a separate category within the typology for these languages. At the same time, it is not yet clear exactly how the patterns that these languages follow can be explained. There are also some striking differences between serialising languages, which indicate that some of the generalisations that have been made, especially in the domain of manner saliency, may need to be revised.

### 5.2 Questions for further research

Due to time and space limits, I have had to leave several interesting issues for further research. I will mention some of them here.

Firstly, I regret that I have not been able to study the manner ideophones of Avatime. Languages related to Avatime are known for their elaborate lexicons of ideophones and it would be very interesting to look into the manner ideophones that are used in Avatime and what kinds of manners they denote. These ideophones could be related to the small mannerverb lexicon and the lack of tier 2 manner verbs in the language.

Secondly, the properties of serial verb constructions and consecutive constructions need to be studied in more detail. It needs to be ascertained that these two types of construction are really different. It also needs to be investigated whether there is a way to distinguish serial verb constructions without serial verb marking from consecutive constructions. As consecutive constructions have a rather marginal status in my data, it needs to be investigated whether they are used spontaneously by more different speakers of the language. More research into serial verb markers is also needed, to determine their origin and morpho-syntactic properties.

Thirdly, I have not been able to conclude whether Avatime serial verb constructions have the macro-event property, as described by Bohnemeyer et al. (2007). Some more research into this area is necessary to compare Avatime to the languages in their sample. It would also be interesting to look into the macro-event status of Thai and Mandarin serial verb constructions, to see how this relates to some of the differences that I have noticed between Avatime and these languages. Especially Thai would be an interesting case, as it can accommodate so many verbs in its serial verb constructions. If Bohnemeyer et al. are correct, these constructions cannot have the macro-event property. The question is then if parts of these constructions do have the MEP and whether these are comparable to Avatime serial verb constructions.

Finally, it would be good to complement this thesis with a psycholinguistic investigation into motion expressions in Avatime. Slobin (2004) assumes that manner-path constructions are easy to process in serialising languages, but this needs to be tested. It would also be interesting to test how much attention Avatime speakers pay to manner and path of motion, compared to speakers of other serialising languages and to speakers of verb-framed and satellite-framed languages. Cognitive consequences of motion typology have not been studied in much detail and studying these in an equipollently framed language would provide more insight into the status of this type of language within the typology.

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## Appendix A. A frog story.

Retelling of the wordless picture book 'Frog, where are you?' by Sammy Oboni, a 31 year old man from Vane.

1. niya-e li-we to-le ka-drụi-a ani o-nyime ani akpokplo-e here-TOP C3S-day C3S-one C6S-dog-DEF and C1S-man and frog-DEF bē-zè ní lị-gba-le me
C1P-stay LOC C3S-building-DEF inside
'Here, one day, a dog and a man and a frog lived in a room.'
2. akpokplo-e è-zè ní tukpe me
frog-DEF C1S-stay LOC bottle inside
'The frog lived inside a bottle.'
3. $1 \varepsilon$ ka-drụi-a ani o-nuvo-є bá-finí ke-se-a- $\varepsilon$
and C6S-dog-DEF and C1S-boy-DEF C1P-lie:LOC C6S-ground-DEF-CM 'And the dog and the boy were sleeping.'
4. etepoe èlēsilà- akpokplo- e e-do ní tukpe me meanwhile night-TOP frog-DEF C1S-mov.out LOC bottle inside 'Meanwhile in the night, the frog came out of the bottle.'
5. li-poe le-lo gi ka-druii-a nì o-nivo-e bé-nyímē-ē C3S-time C3S-that COMP C6S-dog-DEF and C1S-child-DEF C1P-wake.up-CM bá-mo akpokplo- $\varepsilon$
C1P.NEG-see frog-DEF
'When the dog and the child woke up, they did not see the frog.'
6. tukpe kplukplu-yé o-di ni li-gba-le me
bottle empty-DEF:FOC C1S-sit LOC C3S-room-DEF inside
'The empty bottle was sitting in the room.'
7. akpokplo-e e-do za bá-tē níls a-ga ga
frog-DEF C1S-move.out pass C1P-know place C1S-move move
'The frog was out, they did not know where it had gone to.'
8. temesi li-poe le-lo gi bé-nyímē-ē ka-drụi-a kē-dzàgbā
so C3S-time C3S-that COMP C1P-wake.up-DEF C6S-dog-DEF C6S-try
$k \bar{\varepsilon}-k p \bar{\varepsilon} \quad$ li-tukpo-le ní tukpe me
C6S-put.in C3S-head-DEF LOC bottle inside
'So when they woke up, the dog tried and put his head inside the bottle.'
9. o-nyimemi-ye a-ko ye afokpa- $\varepsilon$

C1S-man-DEF C1S-take C1S shoe-DEF
'The man took his shoe.'
10. e-di ye me si ko nyafe akpokplo-e e-tuku ní C1S-look C1S inside COMP so perhaps frog-DEF C1S-enter LOC $y \varepsilon$ afjkpa- $\varepsilon$ me na
C1S shoe-DEF inside Q
'He looked inside, to find out whether the frog had entered his shoe.'
11.ps ka-drụi-a nì o-nyime petee be-di
but C6S-dog-DEF and C1S-man all C1P-look 'But the dog and the man looked.'
12. bá-m̀̀ àkpj̀kplò-̄ ní lị-gba-le me ní kidido me C1P.NEG-see frog-DEF LOC C3S-room-DEF inside LOC thing inside 'They did not see the frog anywhere in the room.'
13. temesi bē-dò $b \bar{\varepsilon}-b \bar{a} \quad f \bar{s} s r \varepsilon ̀ ~ m \grave{\varepsilon} \quad b \bar{e}-d \bar{i} \quad o ̀-\eta w e ̄-n o ̀ ~$ so C1P-move.out C1P-come window inside C1P-look C2S-outside-DEF 'So they came out, they came to the window, they looked outside.'
14. le losoe ka-drụi-a-e tukpe á-wó ní ka-drụi-a li-tukpo-le and so C6S-dog-DEF-TOP bottle C1S-? LOC C6S-dog-DEF C3S-head-DEF 'So as for the dog, the bottle was on the dogs head.'
15. っ-nivo-e tsye a-dra fesre o-le $\grave{\varepsilon} \varepsilon$-kpé ò-zī-lò

C1S-child-DEF too C1S-open window C1S-stand C1S.PROG-put C2S-shout-DEF 'The child too opened the window and he was shouting.'
16. batia ka-drụi-a nì o-nivo-e bia-mo akpokplo-e na
two C6S-dog-DEF and C1S-child-DEF C1P.POT-see frog-DEF Q 'The two the dog and the boy were looking around where the frog was.'
17. temesi li-poe le-lo gi ba-le ka-drụi-a kéwōlì
so C3S-time C3S-that COMP C1P-stand C6S-dog-DEF C6S-fall
nì tùkp $\bar{\varepsilon} \varepsilon$ ní fésrē $n \bar{u}$
and bottle-DEF LOC window opening
'So when they were standing, the dog fell with the bottle out of the window.'
18. temesi o-nyimemi-ye o-le ee-di ki-le gi
so C1S-man-DEF C1S-stand C1S.PROG-look C4S-be.at COMP
ka-drụi-a kè-d̄̄ ke-se-a
C6S-dog-DEF C6S-land C6S-ground-DEF
'So the man stood and was watching how the dog fell onto the ground.'
19. ó-nyīmēmī-yē $\bar{a}-b \bar{a}$

C1S-man-DEF C1S-come
'The man came.'
20. a-bá-bite atuu ki ka-drụi-a e-feke ka

C1S-VEN-do hug give C6S-dog-DEF C1S-lift.up C6S
'He came and hugged it the dog and lifted it up.'
21. ko tukpe ko a-yai

TOP bottle TOP C1S-break
'As for the bottle, it broke.'
22. temesi ka-drụi-a nì o-nyimemi-ye be-ba be-ti ku-de-o
so C6S-dog-DEF and C1S-man-DEF C1P-come C1P-follow C5S-road-DEF 'So the dog and the man came and followed the road.'
23. ba tiaba ka-drụi-a kec-fami

C1P two C6S-dog-DEF C6S.PROG-shout
'The two, the dog was shouting.'
24. o-nyime tsye èé-kpé ozilo si akpokplo-exwe le-e C1S-man too C1S.PROG-put C2S-shout-DEF that frog-DEF what.about be.at-CM nífo akpokplo- $\varepsilon$ ga na where frog-DEF move Q
'The man was shouting: what about the frog, where did the frog go?'
25. temesi bēbā bēnā jkụ́ț̄̄̄

so C1P-come C1P-reach C2P-place C2P-IND-CM
'So, they came, they reached a place.'
 C1P-see COMP C6S-bottle C6S-IND C6S-be.on LOC C2S-tree-DEF inside 'They saw that there was a bottle in the tree.'
27. ani o-se o-to o-lv gi o-ke-lo o-kpasi ni lo me and C2S-tree C2S-IND C2S-stand COMP C2S-hole-DEF C2S-be.in LOC C2S inside 'And there stood a tree in which there was a hole.'
 'The dog wants to take off the bottle that was in the tree, that was hung in the tree.'
29. temesi o-nuvo-e tsye a-mo ku-ko o-to
so C1S-child-DEF too C1S-see C6S-hole C6S-IND
'So the boy also saw a hole.'
30. gi èé-dī ku-ko-o me si kos ku-ko-o

COMP C1S.PROG-look C5S-hole-DEF inside COMP C5S.TOP? C5S-hole-DEF $m \varepsilon$ lo akpokplo- e e-tuku na
inside there frog-DEF C1S-enter Q
'He is looking in the hole if that's where the frog entered.'
31. eteps o-ve-yé o-kpasi ní ku-ko-o me meanwhile C1S-mouse-DEF:FOC C1S-be.in LOC C5S-hole-DEF inside 'Meanwhile there was a mouse inside the hole.'
32. temesi ka-drui-a tsye kèé-dī ke-ve ka-lo me so C6S-dog-DEF too C6S.PROG-look C6S-bottle C6S-that inside si koo kite na

COMP C6S.TOP? how Q
'Meanwhile, the dog was also looking at that bottle, how far it was.'
33. ka-drụi-a po ka-li-mu o-se

C6S-dog-DEF but C6S.NEG-PROG-ascend C2S-tree
'The dog, however, does not climb trees.'
34. ká-má ò-sē mū mè pò ka tsye kes-dzagba kèz-hwani C6S.NEG-be C2S-tree ascend inside but C6S too C6S.PROG-try C6S.PROG-shake o-se-lo si kē-ve-ā ká-w̄̄l̄̄̄ ní ò-sē-lò mè C2S-tree-DEF COMP C6S-bottle-DEF C6S-fall LOC C2S-tree-DEF inside 'It cannot climb a tree, but it was trying and shaking the tree, so that the bottle fell from the tree.'
35. temesi pos ka-drui-a ke-hwani o-se-lo
so when? C6S-dog-DEF C6S-shake C2S-tree-DEF 'So when the dog shook the tree'
36. xé ke-ve-a ke-woli ní niya- $\varepsilon$
when C6S-bottle-DEF C6S-fall LOC here-CM 'and when the beehive fell down here'
37. o-ve-ye tsye e-do ni ku-ko me

C1S-mouse-DEF too C1S-move.out LOC C5S-hole-DEF inside 'the mouse came out of the hole.'
38. ye tsye e-tsyi e-di ka-druii-a

C1S too C1S-turn C1S-look C6S-dog-DEF
'It also turned and looked at the dog.'
39. ka-drui-a tsye ke-di o-ve-ye

C6S-dog-DEF too C6S-look C1S-mouse-DEF
'The dog too was looking at the mouse.'
40. ntemesi o-nyimemi-ye ye tsye a-s $\tilde{\varepsilon}$
so C1S-man-DEF C1S too C1S-leave
'So the man also left.'
41. oze di o-se-ko-lo me si ko ko nilo C1S-be.at look C2S-tree-hole-DEF inside COMP C6S? TOP? there akpokplo-e e-tuku na
frog-DEF C1S-enter Q
'He looked inside the hole to see if it is there the frog entered.'
42. li-poe le-lo gi o-nyimemi-ye e-di o-se-ke-lo me C3S-time C3S-that COMP C1S-man-DEF C1S-look C2S-tree-hole-DEF inside 'That time when the man looked inside the hole,'
43. xé a-kpe o-zi-lo kpe-e gi bia-do-e
when C1S-put C2S-shout-DEF put-CM COMP C1P.POT-move.out-CM 'and when he shouted down that they should get out,'
44. le li-kpatutu-le li-do-e
then C3S-parrot-DEF C3S-move.out-CM
'then the parrot came out.'
45. li-fu-ne li-ku o-nyimemi-ye

C3S-fear-DEF C3S-arrive C1S-man-DEF
‘The man was afraid,’
46. ntemesi a-woli ni o-se-lo me a-do ke-se-a bloo
so C1S-fall LOC C2S-tree-DEF inside C1S-land C6S-groud-DEF ID? 'so he fell from the tree and he landed on the ground.'
47. li-kpatutu-le li-le li-di ye kpe ni ke-se-a C3S-parrot-DEF C3S-stand C3S-look C1S put LOC C6S-ground-DEF 'The bird stood there and looked down on him on the ground.'
48. temesi ka-drụi-a tsye késé ya kee-se
meanwhile C6S-dog-DEF too C6S-leave here C6S.PROG-move.fast 'So meanwhile the dog also left here and it is running.'
49. ke-ti o-nyimemi-ye

C6S-follow C1S-man-DEF 'It followed the man.'
50. o-nyimemi-ye tsye a-bá-tsani lị-klakps e-to C1S-man-DEF too C1S-VEN-meet C3S-rock C3S-IND 'As for the man, he came and encountered a rock.'
51. gi li-kpatutu-le tsye li-ti li-li ni o-nyimemi-ye de COMP C3S-parrot-DEF too C3S-follow C3S-be.at LOC C1S-man-DEF back 'When the bird also followed the man and was at the man's back
52. gi o-nyimemi-ye ablo li-fu-ne li-ku ye COMP C1S-man-DEF now C3S-fear-DEF C3S-arrive C1S 'and the man, now he is afraid.'
53. le e-mu tro li-klakpo-le aba- $\varepsilon$ and C1S-ascend put.on:LOC C3S-rock-DEF top-CM 'And he climbed on the top of the stone.'
54. teps bị-do-me bi-le $\quad$ pwasi o-se eteps áni o-se meanwhile C4P-thing-DEF C4P-stand like C2S-tree meanwhile NEGC2S-tree eteps li-nwafụ-ne me o-ga
meanwhile C3S-bush-DEF inside C1S-animal 'Meanwhile something was standing as if it was a tree but it was not a tree, it was a bush animal.'
55. eteps felekadzeleka- alo lị-ŋwafụ-ne me o-ga bidi o-to meanwile deer-DEF or C3S-bush-DEF inside C1S-animal big C1S-IND 'Meanwhile, the deer or some big bush animal,
56. felekadzeleka-e e-feke o-nivo- $\begin{gathered}\text { tro ni ys a-sia-na aba }\end{gathered}$ deer-DEF C1S-lift.up C1S-child-DEF put.on LOC C1S C3P-horn-DEF top 'The deer put the boy on its horns,'
57. xé a-ta-ko se-no
when C1S-INT-take leave-COM
'and he is going to send him away.'
58. ka-drụi-a ka-li o-to-no

C6S-dog-DEF C6S-be.at C2S-front-DEF
'The dog was at the front.'
59. ke-tsyi ke-di o-nivo-e ni li-wo-le me

C6S-turn C6S-look C1S-child-DEF LOC C3S-sky-DEF inside 'It turned and it saw the boy in the sky.'
60.gi be-se be-tre rrt

COMP C1P-run C1P-go ID
'So when they went running,'
61. gi be-na ku-po nu-i

COMP C1P-reach C5S-valley opening-CM
'when they reached the edge of a valley,'
62. felekadzeleka-є a-ti o-nivo- $\varepsilon$
deer-DEF C1S-take C2S-boy-DEF
'the deer dropped (took) the boy.'
63. ani kịle gi ka-drụi-a tsye kee-se (o)nu-i
and how COMP C6S-dog-DEF too C6S.PROG-run opening-CM
'And how the dog too was running (at the opening)'
64. ka tsye ke-ze-woli kuni o-nivo-s petee ni ku-po me C6S too C6S-IT-fall follow C2S-child-DEF all LOC C5S-valley inside 'it too went and fell (following the child) into the valley.'
65. eteps ku-po ko-ls o-nipo-lo o-lị ni ke-se-a $\quad$ jwii meanwhileC5S-valley C5S-that C2S-river-DEF C2S-be.at LOC C6S-ground-DEF ID 'Meanwhile, in that valley there was a river, there (on the ground) far away.'
66. be-woli ku ní ku-po me

C1P-fall enter LOC C5S-valley inside
'They fell into the valley.'
67. i-se-le le o-nipo-lo $\quad{ }^{-1} \varepsilon \quad$ ni $\quad$ bị-d $\varepsilon \quad$ ya $\quad$ su C2P-tree-DEF stand C2S-river-DEF C2S-be.at LOC C4P-thing there near 'Trees are standing there, the river is near this thing.'
68. gi be-wali ku ku-ni-o me

COMP C1P-fall arrive:LOC C5S-water-DEF inside
'When they fell in the water,'
69. o-nene ó-mo a-fuko xe bia-do suko

C1S-person C1S.NEG-see C1S-? when C1P.POT-move.out already be-dzi lị-gba alo bá-dzi lị-gba
C1P-become C3S-life or C1P.NEG-become C3S-life 'nobody saw them, when they would move out, whether they would be alive or not.'
70. ko akpokplo-s ko bee-ti te so frog-DEF TOP C1P.PROG-follow like.this 'So they were following the frog like this.'
71. temesi o-se-kpa-kpa a-to o-fini ni o-nipo-lo su lo meanwhile C2S-tree-cut-RED C2S-IND C2S-lie LOC C2S-river-DEF near there 'Meanwhile there was a cut down tree lying down near the river.'
72. л-nivo-є e-feke ka-drui-a tro ni li-tukpo-le

C1S-child-DEF C1S-lift.up C6S-dog-DEF put.on LOC C3S-head-DEF 'The boy lifted up the dog and put it on his head.'
73. ko o-se-lo o-fini
so C2S-tree-DEF C2S-lie
'So the wood was lying down.'
74. temesi li-poe le-lo gi be-ga- $\varepsilon$
so C3S-time C3S-that COMP C1P-move-CM
'So when they walked,'
75. o-nyimemi-ye e-feke ka-drui-a tro o-se-kpa-kpa-lo aba C1S-man-DEF C1S-lift.upC6S-dog-DEF put.on:LOC C1S-tree-cut-RED-DEF top 'the man put the dog on the top of the dry wood,'
76. xe ableke ye tsye e-mu ku
when now C1S too C1S-ascend arrive 'before he too climbed on top.'
77. e-mu tro ní o-se-lo aba

C1S-ascend put.on LOC C2S-tree-DEF top 'He climbed on top of the tree.'
78. nilo gi be-mu tro po-
there COMP C1P-ascend put.on finish-CM 'There where they finished climbing,'
79. o-nipo-lo me xe ableke teps be-mo akpokplo-a C2S-river-DEF inside when now ? C1P-see frog-DEF.P in the river when now they saw the frogs.'
80. akpokplo-e tiaba ba-le gi akpokplo-e bee-ti frog-DEF C1.two C1P-be.at COMP frog-DEF C1P-follow 'There were two frogs including the frog that they were following.'
81. temesi ablo o-nivo-s ni ka-drui-a ba-tini ni so now C1S-child-DEF and C6S-dog-DEF C1P-be.on LOC o-se-kpa-kpa-l(0) aba
C2S-tree-cut-RED-DEF top
'So now the boy and the dog were on the top of the dry wood.'
82. bee-di akpokplo-ya ba-kpe kile bes-yo ni o-nipo-lo me C1P-look frog-DEF.P C1P-put how C1P.PROG-jump LOC C2S-river-DEF inside 'They were looking down on the frogs how they were hopping in the river.'
83. temesi o-nyimemi-ye a-ze-vu akpokplo-عa-ks kpe ye ka-wla me so C1S-man-DEF C1S-IT-catch frog-DEF C1S-take put C1S C6S-hand inside so the boy went and caught the frog and put it in his hand
84. ye nì ka-druii-a bes-ga ku-ni-o me gi bes-tre C1S and C6S-dog-DEF C1P-move C5S-water-DEF inside COMP C1P-go 'He and the dog were walking through the water and going.'
85.temesi li-poe le-lo gi be-se ni o-nipo-lo me
so C3S-time C3S-that COMP C1P-leave LOC C2S-river-DEF inside 'When they left from the river,'
86. akpokplo-ya gogo-a be-mu tro ní o-se-ke-lo aba frog-DEF.P other-DEF C1P-ascend put.on LOC C2S-tree-?-DEF top 'The rest of the frogs climbed on top of the dry wood'
87. xe be-di ba kpewhen C1P-look C1P put-CM 'and they looked down on them.'
88. xe be-se xe be-tiku
when C1P-leave when C1P-enter 'And they left, and they disappeared.'

## Appendix B. A lego route description task.

Walter Yao Ofasi (Y), an old man from Vane. explains to Charlotte Adzoyo Bakudie (A), a 69 -year old woman from Vane, which way she should walk with a duplo doll through a duplo landscape. A schematic drawing of the route that was described can be seen on page 114.

1. $\mathrm{Y}:$ ma-ta-kpese 10

1S-INT-start EXCL
'I'll be starting!'
2. Y: xe wo-se wo yelo-ye ke-pe-a mé $10-\varepsilon$
when 2 S-leave 2 S yellow-DEF C6S-house-DEF inside:LOC there-CM When you leave your yellow house there,'
3. Y: ga kavame
move left
'walk left.'
4. Y: tré kavame
go:LOC left
'Go left.'
5. Y: to ba straight ni kona liye me ni wo o-to-no

ATT comestraight LOC corner C1S.this inside LOC 2 S C2S-front-DEF 'Then come straight to this corner front of you.'
6. Y: hm kịle gi wo-di
hm how COMP 2S-sit 'Hm, how you are sitting.'
7. Y: xe wo-na $10-\varepsilon$
when 2 S-reach there-CM 'When you reach there,'

| 8. Y: | zā | wō-kú-tré | ke-pe-a | toto |
| ---: | :--- | :--- | :--- | :--- |
|  | pass | 2S-NEG-go | C6S-house-DEF | any |
|  | 'pass, don't go to any house.' |  |  |  |

9. Y: to ga ba ni o-to-ns dze ni wo o-za-lo ATT move come LOC C2S-front-DEF again LOC 2S C2S-direction-DEF 'Come forward again, in your direction.'
10. A: ee $m(\varepsilon)$ szalo
yes 1S C2S-direction-DEF 'Yes, my direction.'

| 11. Y: to | gā-gà | tawa | sisamí-ye | $s u$ |
| ---: | :--- | ---: | :--- | :--- |
|  | ATT move?-move tower | small-DEF | side |  |
|  | 'Come and pass near the small tower.' |  |  |  |

12. A: li-xwi-lé ..... ló
C3S-thatch-DEF EXCL 'The thatch.'
13. Y: o li-xwi-le ko wo-se le su ko no C3S-thatch-DEF TOP 2S-leave C3S side just 'No, as for the thatch, you just left it.'
14. $\mathrm{Y}: ~ s e \quad l \varepsilon$ ..... Su
kura
leave C3S side completely
'Leave it.'
15. A: ma-se1S-leave'I left it.'
16. Y: wec-ga tawa sisami-ye sul $\quad \varepsilon$
2S.PROG-move tower small-DEF side ? you are passing near the small tower
17. Y: $g$
COMP C1S-be.at 2S-side C1S-last-CMwhich is near you, the last one
18. A: olị me kavame
C1S-be.at 1S left
'Which is on my left.'
19. Y: kayawlameright'On the right.'
20. Y: kayawlame mec-si ..... ga
right 1S.PROG-COMP move
'On the right I'm telling you to walk.'
21. A: wo kapame wo-kpese we-si kabame
2 S right 2 S -start 2S-COMP ..... left
'You said I should pass right, but you started by telling me to pass left.'
```
22. Y: kabamé wo-tre gbã
    left:FOC 2S-go first
    'It is left you went to first.'
```

23. $\mathrm{Y}: 1 \varepsilon$ wo-ga be-ya be-bite ku-ka o-to-no- $\varepsilon$
and 2S-move C4P-this C4P-do C5S-fence C2S-front-DEF-CM
'Then you passed in front of this thing that looks like a fence.'
24. Y: xe li-xwi-le li-gbec-le lī-nw $\bar{\varepsilon} \quad \jmath-t っ-n っ-\varepsilon$
when C3S-thatch-DEF C3S-building-DEF C3S-appear? C2S-front-DEF-?
ni kayawlame-
LOC right-CM
'When the thatch house is appearing in front on the right,'
25. Y: ga ni o-to-no
move LOC C2S-front-DEF
'pass in front of it.'
26. A: | we | kavame $a h$ |
| :--- | :--- | :--- |
| 2S? left ah |  |
|  | 'You said left, ah!' |
27. Y: ga ni o-to-no kayawlame kajawlame
move LOC C2S-front-DEF right right
'Pass in front of it on the right, on the right.'

| 28. A: | gì | má-sé |
| :--- | :--- | :--- |
|  | COMP | 1S-leave like.this |
|  | 'When I left like this,' |  |


| 29. A: | miga $\quad$ ni | get bidi-ye | $o-n u$ |
| :--- | :--- | :--- | :--- | :--- |
|  | 1S.SUBJ-move LOC | gate big-DEF | C2S-entrance |
|  | 'do I pass in front of the big gate?' |  |  |

30. Y: ee
yes
'Yes.'

| 31. A: | to | mi-ga | $n i$ |
| :--- | :--- | :--- | :--- | | kanawlame |
| :--- |
| ATT | 1S.SUBJ-move LOC | right |
| :--- |
| do I pass through the right hand side? |


| 32. Y: wo-ku-ga get bidi-ye | o-nu | wó-na | get-ye |
| :--- | :--- | :--- | :--- | :--- |
| 2S-NEG-move gate big-DEF | C2S-entrance | 2S.NEG-reach | gate-DEF |
|  | 'Don't pass in front of the big gate, you haven't reached the gate.' |  |  |

```
33. Y: nilo wo-se
    there 2S-leave
    'Where you left.'
```

| 34. Y: | wō-tsyí | ga | ku-ka-e | $l \varepsilon-l o$ | $k u-k a$ |
| ---: | :--- | :--- | :--- | :--- | :--- |
|  | 2S-turn move | C5S-fence-? | C3S-that | C5S-fence | put-REE |
|  | 'You turn around that fence, the fence placed.' |  |  |  |  |

35. Y: ga ko o-to-no tae

move C5S C2S-front-DEF little

'Pass by the front of it a little.'

| 36. A: | ni | kanawlamé | lo |
| :--- | :--- | :--- | :--- |
|  | LOC | right | EXCL |
|  | 'By the right hand!' |  |  |


| 37. Y: | hmm | wokutre | ni | li-gba-le | li-xwi-gba-le |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | hmm | 2S-NEG-go | LOC | C3S-building-DEF | C3S-thatch-building-DEF |

38. Y: ga
move
'Walk.'
39. A: mi-ga ple
1S.SUBJ-move descend
'May I come down?'
40. Y: ga mu ni wo o-to-ns
move ascend LOC 2 S C2S-front-DEF
'Come up in front of you.'
41. A: ee ma-traa
yes 1S-be.coming
'Yes, I'm coming.'

| 42. Y: wo | o-za-10 | W | a-za-1o |
| :---: | :---: | :---: | :---: |
| 2 S | C2S-direction-DEF | 2 S | C2S-direction-DEF |
|  | direction, your dir |  |  |

43. Y: wo-ga wlo-a
2S-move there-Q
'Have you passed there?'
44. A: ee
yes
'Yes.'
45. Y: tawa liye gi $0-l i ̣ \quad l o-\varepsilon \quad g a \quad y \varepsilon \quad o-t o-n o \quad z a$ tower C1S.this COMP C1S-be.at there-CM move C1S C2S-front-DEF pass 'The tower which is there, pass in front of it.'

| 46. Y: | wo-ga | $y \varepsilon$ |  |
| ---: | :--- | :--- | :--- |
|  | 2S-to-no | zaa |  |
|  | 'Have you passed in front of it?' |  |  |

47. A: ee
yes
'Yes.'
48. Y: $\begin{array}{rlr}\text { ga } & \text { o-bidi-ye } & \text { ese } \\ & \text { move } & \text { C1S-big-DEF } \\ & \text { then } & \text { under }\end{array}$
49. A: iliye gi o-li $\quad m e$ kaname
this COMP C1S-be.at 1S right 'The one which is on my right hand side.'


| 51. Y: | wo-ga | ye | o-to-no | ni |
| :--- | :--- | :--- | :--- | :--- |
|  | 2S-move | C1S | C2S-front-DEF | LOC |
|  | 2S |  |  |  |
|  | 'You pass in front of it on your...' |  |  |  |

52. A: me ka-pa-a

1S C6S-part-DEF 'My side.'
53. Y: ni wo ka-pa-a

LOC 2S C6S-part-DEF
'On your side.'
54. Y: aní nikolo o-za-lo
not there C2S-direction-DEF 'That is not in that direction.'
55. A: mi-ga ye o-to-ns te

1S.SUBJ-move C1S C2S-front-DEF like.this 'I should pass in front of it like this.'
56. Y: ee wee-tsyi klani ye yes 2S.PROG-turn move.around C1S 'Yes, you are going around it.'
57. Y: wo-ku-ga ye o-to-no

2S-NEG-move C1S C2S-front-DEF
'You don't pass in front of it.'

| 58. Y: | $g a \quad y \varepsilon$ | o-to-no | $n i$ | wo | ka-pa-a |
| ---: | :--- | :--- | :--- | :--- | :--- |
|  | move | C1S | C2S-front-DEF | LOC | 2S | C6S-part-DEF

59. Y: ni wo ke-tu-ya

LOC 2S C6S-front-DEF
'In front of you.'
60. Y: wo-ga wlo-a

2S-move there-Q have you passed there?
61. Y: wo ke-tu-ya

2S C6S-front-DEF
'In front of you.'
62. A: ee me ke-tu-ya
yes 1 S C6S-front-DEF
'Yes in front of me.'
63. Y: ko wo-ga wlo-e ko wo-ga ye sul-ye
then 2 S -move there-CM then 2 S -move C 1 S side-? 'You pass there, and you walk past it.'
64. Y: able ga do ni o-bidi-ye ese
now move move.out LOC C1S-big-DEF under 'Now pass under the big one and come out.'
65. A: ko li si mee-tsyi klani ye so be.at COMP 1S.PROG-turn move.around C1S 'So it means I'm going around it.'
66. Y: ee wo-bite pwasi wee-tsyi klani ye yes 2S-do like 2S.PROG-turn move.around C1S 'Yes, you are doing as if you're going around it.'

```
67. Y: po wo-klani ye petee lo
    but 2S-move.around C1S all EXCL
    'But you don't go all around it.'
```

68. Y: se lo ko ko wo-tre o-bidi-ye ese
leave there just then 2S-go:LOC C1S-big-DEF under
'Leave there immediately, you go under the big tower.'
69. A: $1 \varepsilon$ ma-se ye sụ xe ní kaname then 1S-leave C1S side when LOC right 'Then I left it when at the right.'
70. Y: ee tre o-bidi-ye ese
yes go C1S-big-DEF under 'Yes, go under the big one.'
71. A: to mi-za tre mi-ga o-to-no ablô

ATT 1S.SUBJ-pass go 1S.SUBJ-move C2S-front-DEF now 'I should pass and come to the front now.'
72. Y: ee
yes
'Yes'
73. A: to mị-tre ni o-bidi-ye ese ATT 1S.SUBJ-go LOC C1S-big-DEF under 'Now I can go under the big one.'

| 74. Y: | ye | ka-pa-a | po | aní |
| :--- | :--- | :--- | :--- | :--- |
| o-to-no |  |  |  |  |
|  | C1S | C6S-part-DEF but not | C2S-front-DEF |  |
|  | 'Part of it, but not at the front.' |  |  |  |


76. Y: wo-tre o-bidi-ye ese a

2S-go C1S-big-DEF under Q
'Have you gone under the big one?'
77. A: ee
yes
'Yes'
78. Y: ga o-hu-lo su move C2S-vehicle-DEF side pass near the car
79. Y: $1 \bar{\jmath}$ sú yà ko

C2S side here just 'Near it there.'
80. A: ee ma-ga o-hu-lo su
yes 1S-move C2S-vehicle-DEF side
'Yes, I've passed the car.'
81. A: ma-za tre ke-pe-a me 1S-pass go C6S-house-DEF inside 'I've passed to the house.'



[^0]:    ${ }^{1}$ Throughout this thesis I will be using capital letters to refer to a vowel harmony pair in the following way $\mathrm{I}=$ $\mathrm{i} / \mathrm{i}, \mathrm{U}=\mathrm{u} / \mathrm{u}, \mathrm{E}=\mathrm{e} / \varepsilon, \mathrm{O}=\mathrm{o} / \mathrm{o}$ and $\mathrm{A}=\mathrm{e} / \mathrm{a}$.

[^1]:    ${ }^{2}$ As this is a systematic process, I will write both vowels in the Avatime examples in this thesis and leave it to the reader to deduce which sounds are elided. When tone is marked in the example, it will not be marked on the elided vowel. When elision happens in other contexts or is deemed especially important, I will indicate it by putting the elided vowel between brackets or by adding a separate line for the phonetic form, as in (8).

[^2]:    ${ }^{3}$ Capital $L$ in this table represents either 1 or $n$. This consonant is realized as $n$ when the preceding syllable contains a nasal or nasal vowel.

[^3]:    ${ }^{4}$ Note that $d \overline{\bar{y}}$ 'move from' is different from d̄̄ 'land' which was discussed in Section 3.1.4. The tone of the verb $d \overline{\bar{\jmath}}$ 'move from' raises when it is followed by a mid or high tone, which is almost always the case, as it is usually followed by ní. The tone of its subject prefix then becomes high. The verb $d \bar{\jmath}$ 'land' is always mid and has low or mid subject prefixes.

[^4]:    ${ }^{5}$ (loc) indicates that the ground argument is expressed in a prepositional phrase.

[^5]:    ${ }^{6}$ All speakers above 65 years old that I recorded use serial verb markers. All speakers that I recorded below 45 years old do not use them. Unfortunately I do not have data from speakers between 45 and 65 years old, so I cannot provide a precise indication of the age above which people use serial verb markers.

[^6]:    ${ }^{7}$ This example could actually be a case of serial verb marking as well, since the vowel preceding the second verb is identical to the vowel the serial verb marking would probably be. However, as I do not have any examples of speakers under 69 using serial verb marking when the previous vowel is different from the marking, I consider it as a case of lengthening.

[^7]:    ${ }^{8}$ This example was given to me by an old man, who does not use the phrase himself but mentioned that some people say it like this. People who use this phrase are likely to be younger people, as the other linkers also seem to be disappearing in favour of lengthening of the previous vowel. Unfortunately, I do not have any examples of serial verb constructions in the potential mood produced by young speakers.

[^8]:    ${ }^{9}$ I did not include constructions directly translated from English or obtained by grammaticality judgements in this sample.

