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## **Motion in serializing languages revisited: the case of Avatime**

### **Abstract**

In the typology of motion lexicalization, two types of languages have traditionally been distinguished: satellite-framed and verb-framed. Serializing languages are difficult to fit into this typology and have been claimed to belong to a third type: equipollently framed. In this paper I use grammatical criteria to show that Avatime, a serializing language, should indeed be classified as equipollently framed. I also study motion descriptions in narratives. Avatime is similar to other serializing languages with respect to path elaboration, but unlike other serializing languages it has low manner saliency. Equipollently framed languages thus do not behave as a single type.

### **1. Introduction**

This paper discusses the expression of motion events in Avatime in a cross-linguistic perspective. Avatime is a Kwa (Niger-Congo) language spoken in Ghana. Like other Kwa languages, Avatime makes frequent use of serial verb constructions. When it comes to the expression of motion events, serializing languages such as Avatime are difficult to classify typologically. In this paper I will describe how motion events can be expressed in Avatime using clauses with a single verb and serial verb constructions. I will also go into the use of motion expressions in narratives. Motion expressions in Avatime will be compared to other languages, especially other serializing languages. Before turning to the description of Avatime, I will give a brief overview of the literature on motion expression typology.

#### **1.1 A typology of motion expression**

Motion events can be segmented into several components. One of these is the moving *figure* and another is the *ground* with respect to which the figure moves. The ground can be the goal of movement, source of movement, a landmark that is passed or crossed or a more general location or medium. The motion follows a certain trajectory with respect to the ground, which is usually called the *path* of motion. Finally, the figure may move in a certain *manner*: fast or slow, using a vehicle, with certain limb movements, etc. An example of a motion description in English can be seen in (1). Here the manner of motion is indicated by *ran*, the path by *out*, *past* and *towards* and the ground elements are *the kitchen door* (a source), *the animal pens* (a landmark) and *Jasón's house* (a goal).

- (1) *I ran out the kitchen door, past the animal pens, towards Jasón's house*  
(SLOBIN 1997: 437)

Languages differ in how these semantic components are encoded in the grammar and lexicon. TALMY (1985) was the first to describe these differences systematically. He takes path to be the core component of a motion event and notices that languages can encode path in two ways: in a verb or in a satellite (a

particle or affix dependent on the verb). Languages that typically encode path of motion in a satellite are called satellite-framed. Manner of motion in these languages is encoded in the main verb. English is an example of a satellite-framed language. In example (1), manner is encoded in the main verb, *ran*, and a satellite, *out*, expresses path.<sup>1</sup> Languages that typically encode path of motion in the main verb are called verb-framed. If a manner component is also expressed in these languages, this is usually encoded in an adjunct constituent, often a gerundive form of a manner verb. An example of a motion construction in a verb-framed language, French, can be seen in (2). The path is expressed by the verb *entrer* 'enter' and the manner is expressed by the phrase *en courant* 'running'. The expression of manner is optional in this construction.

- (2) *il est entré dans la maison (en courant)*  
 he is entered in the house at running  
 'He ran into the house.'

AMEKA & ESSEGBEY (2001) and SLOBIN (2004) point out that there are languages which cannot be classified as satellite-framed or verb-framed. In these languages, manner and path are expressed in equivalent categories. SLOBIN proposes the term equipollently framed for these languages and mentions three types of equipollently framed constructions: bipartite verbs in which one part is used to express manner and another to express path; manner and path preverbs that can both be combined with general motion verbs; and serial verb constructions that combine manner verbs and path verbs. Of these types, languages with serial verb constructions (SVCs) have received most attention in the literature. An example of such a language is Ewe (3).

- (3) *ɔvɛ́-á tá yí xɔ-a me*  
 child-DEF crawl go room-DEF containing.region  
 'The child crawled into the room.' (AMEKA & ESSEGBEY 2001: 3)

In this example both manner (*ta* 'crawl') and path (*yi* 'go') are encoded in verbs. Neither verb seems to be the main verb in the construction. If we go by lexicalization of path only, these languages would be verb-framed, as path is lexicalized in a verb. However, unlike in verb-framed languages, manner is not encoded in an adjunct, but in another finite verb. TALMY (2009) proposes to analyze serializing languages as satellite-framed, with the second verb of the manner-path SVC functioning as a satellite to the first verb. He uses Mandarin

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<sup>1</sup> The other path components in this example are expressed by the prepositions *past* and *towards*. TALMY (1985) excludes adpositions from the category of satellites. Nevertheless, adpositions are often used to express path and in English the distinction between satellites and prepositions is not always clear. See FILIPOVIĆ (2007: 33-36) and BEAVERS, LEVIN & THAM (2010: 337-339) for arguments against separating satellites from prepositions. For the present paper, the exact nature of the category satellite is not important and wherever I refer to it, adpositions may be included.

Chinese as an example. Other authors maintain that serializing languages belong to a third type (see CHEN & GUO (2010) for Mandarin, ZLATEV & YANGKLANG (2004) for Thai and AMEKA & ESSEGBEY (2001) for Ewe, Akan and Sranan). These studies will be discussed in more detail in Section 2.3.

## 1.2 Motion typology and narration style

SLOBIN (1996, 1997, 2004) finds that satellite-framed languages (S-languages) and verb-framed languages (V-languages) differ from each other in interesting ways with respect to the description of motion in narratives. The main differences are that manner of motion is more salient in S-languages than in V-languages and that S-languages tend to elaborate more on the description of the path.

The differences in manner saliency are related to the codability of manner in the two types of languages. In S-languages, the main verb can always be used to express manner. Even if a speaker is mainly interested in describing path of motion, a main motion verb is still needed to accompany the path satellite. Because of this, manner is frequently encoded even when it is not important in the context. In V-languages, manner expression is entirely optional, as we saw in (2). Path-only constructions are less complex than path + manner constructions, as the former only need a path verb whereas the latter need an added adjunct. Because of this, speakers of V-languages tend to leave out manner when they talk about motion events, unless it is particularly relevant in the context. A related observation is that V-languages have a much more restricted and basic lexicon of manner expressions than S-languages, which tend to have many expressive and semantically detailed verbs at their disposal.

The tendency to use more elaborate path descriptions in S-languages may seem counterintuitive at first. However, this is due to the possibility in S-languages to express multiple path elements within a single clause. We have seen this in (1), where three path expressions can be combined with a single manner verb. To translate this sentence to a V-language, two or three path verbs would be needed<sup>2</sup>, which would each need their own clause. Since using a lot of clauses slows down the pace of narration, expressing complex paths in detail is avoided in V-languages.

Since V-languages tend to avoid both manner descriptions and elaborate path descriptions, they generally describe motion in less detail in narratives. Instead, speakers of V-languages use more static scene descriptions, from which path and manner information can be inferred.

The narrative style of equipollently framed languages (E-languages) has mostly been studied looking at serializing languages. The conclusion seems to be that these languages are in some ways in between S-languages and V-languages but in other ways different from both (SLOBIN 2004, ZLATEV & YANGKLANG 2004,

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<sup>2</sup> Path can in some cases be expressed by prepositions in V-languages, but this is limited to paths that do not cross a boundary (SLOBIN 1997). In an actual translation of sentence (1) to Spanish by a translator, SLOBIN found that all three path expressions were translated with verbs (and the original manner verb was omitted in the translation).

CHEN & GUO 2009). How the narrative style of serializing languages compares to that of S-languages and V-languages will be discussed in more detail in Section 3.

### 1.3 Avatime and the motion typology

Avatime uses serial verb constructions to combine the expression of manner and path of motion. Motion constructions in related Kwa languages have been investigated in two previous studies (LAMBERT-BRÉTIÈRE 2009 on Fon and AMEKA & ESSEGBEY 2001 on Akan and Ewe). Both these studies are mostly based on grammatical data and do not describe language use in narratives in much detail. Moreover, they do not come to the same conclusions with regard to the framing patterns of the languages they discuss (see Section 2.3). Motion event descriptions in narratives in serializing languages have been investigated, but only for languages unrelated to Avatime: Thai and Mandarin.

Thus, the main questions that will be addressed in this paper are (1) can Avatime be classified as a satellite-framed language, a verb-framed language or an equipollently framed language? and (2) how does the use of motion constructions in Avatime narratives compare to that in verb-framed languages, satellite-framed languages and other serializing languages?

To answer these questions I draw on a corpus of elicited sentences, elicited narratives, and non-elicited discourse of various genres. This data was collected during fieldwork in Vane, one of the Avatime-speaking villages. Most data used for this paper was collected in 2008, but some additional data comes from fieldtrips in 2010 and 2011.

In Section 2 of this paper I will look into the grammatical properties of Avatime motion constructions. Section 3 focuses on the expression of motion events in narratives. For this section I mostly use a corpus of motion expressions found in four frog story retellings<sup>3</sup>, to be able to compare Avatime to other languages. Occasionally I draw on a larger sample of 13 narratives, which, apart from the frog stories, includes folk tales, personal stories and descriptions of historical events and ceremonies.

## 2. The expression of motion in Avatime

### 2.1 Avatime

Avatime is a Ghana-Togo Mountain language, part of the Kwa language family, part of the Niger-Congo phylum. Within Ghana-Togo Mountain, Avatime is part of the Ka-subgroup. It is spoken in the Volta Region of Ghana, within the southern cluster of Ghana-Togo Mountain languages. Neighboring languages are Ewe, Tafi, Nyangbo and Logba. Alternative names for the language as used by its speakers are Siya(se) and Sideme(se).

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<sup>3</sup> The term 'frog story' refers to the wordless picture book *Frog, where are you?* (MAYER, 1967). This picture book has been used all over the world to elicit narratives. The story revolves around a boy and his dog who are searching for the boy's escaped pet frog.

Avatime is a tone language with three levels: low (marked `), high (unmarked) and extra-high (marked ´). The extra high tone has a limited distribution and is often the result of tone-raising processes. Avatime has 7 vowels: i, ɪ [i], e, ɛ, a, ɔ, o, ɔ [u], u. These vowels participate in ATR-based vowel harmony, whereby the vowels of affixes and clitics changes depending on the root vowel.

Like most other Ghana-Togo Mountain languages, Avatime has a noun class system. This consists of six singular-plural pairings and one class for mass-nouns. These are numbered from 1 to 7 in the example glosses. Noun classes are marked by prefixes on the noun, with different prefixes for singular and plural. Noun class agreement is marked on definite suffixes, indefinite articles, numerals, demonstratives and subject prefixes on the verb.

Subject agreement is obligatory in Avatime and in the absence of a lexical subject, the subject prefix has a pronominal function. Word order is strictly SVO. Serial verb constructions are common in Avatime.

Locative phrases consist of the preposition *ní* followed by a noun (phrase) followed by a postposition. An example can be seen in (4). The preposition encodes the locative relation, while the postposition specifies the search domain, i.e. the part of the reference object where something is located (c.f. AMEKA 1995). Instead of a postposition, a noun can also be used to indicate the search domain, as in (5). If the noun (phrase) itself is already a place indication, such as the name of a town, no postposition is needed. The preposition *ní* is often elided, leaving only its extra high tone behind which then associates to the previous syllable. To indicate this in the examples I add :LOC to the glossing of this previous syllable. For an example, compare (6) to (4).

(4) *ò-se-lò      ò-tɪni      ní      li-to-lè      abà*  
 C<sub>2</sub>S-tree-DEF C<sub>2</sub>S-be.on LOC C<sub>3</sub>S-mountain-DEF on  
 'The tree is (standing) on the mountain.' (RS0808291)<sup>4</sup>

(5) *xé      gí      má-dɔ́      ò-hu-lò      ke-de-à*  
 when REL 1S-move.from:LOC C<sub>2</sub>S-car-DEF C<sub>6</sub>S-back-DEF  
*mi-tsyí      ple*  
 1S.SUBJ-turn descend  
 'When I come from behind the car (lit. the car's back), I should turn down.'  
 (lego\_KA-RE)

(6) *ó-nyime      ó-tɪní      l̩-klakpɔ-lè      abà*

<sup>4</sup> Codes between brackets refer to the filename of the recording that the sentence was taken from. Numbers consisting of 6 or 7 digits refer to the recording date (yymmdd) and potentially an identification number. When no date is indicated, the recording stems from 2008. Codes usually include a keyword that refers to the content of the recording or type of task. Codes without a keyword refer to elicitation sessions. Letters at the end refer to the initials of the Avatime speakers recorded in that session. All recordings are archived with The Language Archive at the Max Planck Institute for Psycholinguistics in Nijmegen. The recordings from 2008 can also be found at ELAR.

C<sub>1</sub>S-man C<sub>1</sub>S-be.on:LOC C<sub>3</sub>S-ant.hill-DEF on  
 'The man was on the ant hill.' (frog\_SO)

## 2.2 Motion constructions

At first sight, Avatime looks similar to verb-framed languages such as French, since it uses path verbs to describe the path of motion. Path verbs can be used with (7) or without (8) a ground expression.

(7) *bé-dó ní ò-dzògbè-lo ò-za-lò*  
 C<sub>1</sub>P-move.from LOC C<sub>3</sub>S-desert-DEF C<sub>3</sub>S-direction-DEF  
 'They came from the direction of the desert.' (history\_WO)

(8) *lě ka-drùí-a ke-dò*  
 and C<sub>6</sub>S-dog-DEF C<sub>6</sub>S-move.out  
 'And the dog came out.' (frog\_SN)

Note that in a satellite-framed language such as English these sentences have to be translated using a general motion verb such as *come* or *go* with a path satellite.

Similar to both V-languages and S-languages, a manner verb is used for descriptions of manner only, as in (9).

(9) *lě ɔ-ga-è èé-se*  
 and C<sub>1</sub>S-animal-DEF C<sub>1</sub>S.PROG-run  
 'And the animal was running.' (frog\_100719\_DQ-PhA)

When manner and path are combined, serial verb constructions are used. In a manner-path SVC the first verb always indicates the manner of motion and the second verb indicates path. Like in single verb constructions, path verbs can occur with (10) or without (11) a ground expression.

(10) *lě ka-drùí-a pò ke-se ku ní lì-kla-nè ese*  
 and C<sub>6</sub>S-dog-DEF CTR C<sub>6</sub>S-run arrive LOC C<sub>3</sub>S-stone-DEF under  
 'And the dog ran under the stone.' (frog\_AB)

(11) *lě àkpòkplɔ-ε a-yɔ dò=e*  
 and frog-DEF C<sub>1</sub>S-jump move.out=CM  
 'And the frog jumped out.' (frog\_DQ)

Multiple path verbs can also be combined in a serial verb construction, as is shown in (12) and (13).

(12) *lě ò-nùvɔ-ε xɔ e-mu ku ní ò-se bidí ló-ló mè*  
 and C<sub>1</sub>S-child-DEF CTRC<sub>1</sub>S-ascend arrive LOC C<sub>2</sub>S-tree big C<sub>2</sub>S-DIST inside

'And the child climbed into that big tree.' (frog\_100719\_DQ-PhA)

- (13) *kpakpaxe e-dzi sè*  
 duck C<sub>1</sub>S-return leave  
 'The duck went away / returned and left.' (duck\_SO)

The first verb in such a path-path construction is usually a verb indicating direction without specifying a ground element (*mu* 'ascend' in (12) and *dzi* 'return' in (13)). The second verb may be used to indicate a ground (*ku* 'arrive' in (12)).

Grammatically, it is possible to specify two ground elements in a serial verb construction, such as in (14). However, these constructions do not occur in my corpus of narratives.

- (14) *mèé-sè gbàdzeme é-tréé ðvanò*  
 1S-leave:LOC Gbadzeme SVM-go:LOC Vane  
 'I went from Gbadzeme to Vane' (S0811262 WO)

DEFINA (in preparation) shows that these serial verb constructions are syntactically and semantically different from the manner-path type. Semantically, rather than expressing two simultaneous aspects of an event, as manner-path SVCs do, they express sequential actions. That they are syntactically different is shown by the fact that each verb can be independently modified by a temporal adverb, something that is not possible in the manner-path type of SVC. DEFINA thus analyzes these constructions as less tightly integrated than manner-path SVCs<sup>5</sup>.

Path-path SVCs with only one ground element (see (12) and (13) above) seem to belong to the same type as manner-path SVCs. Rather than expressing sequential actions, as the constructions with multiple grounds do, the two path elements in these constructions express different aspects of the same event.

Motion SVCs with more than two verbs are rare but possible. One manner verb can be combined with two path verbs, as in (15) and three path verbs can be combined, as in (16).

- (15) *mè-se è-mu tréé àmèdzòfe*  
 1S-move.fast SVM-ascend go:LOC Amedzofe  
 'I ran up to Amedzofe.' (S0811291 WO)

- (16) *í-zě-dóó ðvanòó zaá tréé gbàdzemè*  
 C<sub>1</sub>S-HAB-move.from:LOC Vane:SVM pass:SVM go:LOC Gbadzeme  
 'he always goes from Vane to Gbadzeme' (S0811263 MM)

<sup>5</sup> In DEFINA's (in preparation) analysis, there are three types of SVCs, ranging from more to less syntactically and semantically integrated. Manner-path SVCs are instances of the most tightly integrated type whereas path-path SVCs with multiple grounds are of the loosest type.

There is some evidence that it is not possible in Avatime to express more than two ground elements in SVCs. If this is really the case, Avatime would behave differently from the serializing languages in Bohnemeyer et al's (2007) sample, which either allowed three ground elements (source, landmark and goal) or were restricted to one. More research is needed to confirm this.

Interesting to note is that Avatime differs from some other serializing languages such as Mandarin and Thai in not having a separate slot in the serial verb construction for deictic verbs. Mandarin and Thai have (at least) three slots, the first for manner, the second for path and the final slot for deixis. An example can be seen in example (17) from Thai.

- (17) *kháw dəən jɔ̀n khâw maa*  
 3sg walk reverse enter come  
 '(S)he walked back into the house.' (towards the DC)  
 (ZLATEV & DAVID 2004: 129)

In Avatime, deictic verbs are treated in the same way as other path verbs and in fact frequently occur with ground expressions, as we saw for instance in (15). The directionality of an event with respect to the deictic center can also be indicated by directionality prefixes on the verb: *bá-* 'ventive' and *zě-* 'itive'. An example of a combination of manner, path and deixis using a directionality prefix and a manner-path SVC can be seen below (18).

- (18) *bɛ-bá-wɔ̀li ku ní ò-nípé ló-ya mɛ̀*  
 C<sub>1</sub>S-VEN-fall arrive LOC C<sub>2</sub>S-river C<sub>2</sub>S-PROX inside  
 'They fell into this river.' (towards the DC) (frog\_SO)

There is one verb in Avatime that can be used both as a manner verb and as a path verb. This is the generic motion verb *ga* 'move (through)'. This verb can be used on its own to indicate any kind of motion, although it can also take an object to indicate the medium or space through which the figure moves (implying the entire space is crossed). It can be used in the manner slot of manner-path SVCs to indicate unmarked manner (19) and it can be used in the path slot of manner-path SVCs to indicate boundary crossing movement (20).

- (19) *ɛ́ɛ-gà trɛ́ kɛ̀dzia mɛ̀*  
 C<sub>1</sub>S.PROG-move go:LOC market inside  
 'She walked to the market.' (elic-verbfoc\_100719\_DQ)

- (20) *kɛ́-wɔ̀li gà fɛ̀srɛ mɛ̀*  
 C<sub>6</sub>S-fall move window inside  
 'It fell through the window.' (frog\_AB)

### 2.3 Main verb status and serial verb constructions

One important question in deciding how to classify Avatime in the motion typology is whether one of the two verbs in a serial verb construction can be regarded as the main verb. TALMY (2009) argues that in Lahu and in Mandarin the manner verb functions as the main verb and the path verb is dependent. LAMBERT-BRÉTIÈRE (2009) claims that this is also the case in Fon, another Kwa language.

TALMY (2009) mentions several properties that could indicate whether one of the two verbs is the main verb. Some of these are whether or not a verb can take inflections, occurs across a wide range of construction types, is taken from an open class and has a richer semantics. He also notes that any differences between the group of words that can occur as single verbs and in the second verb slot constitute evidence for two separate word classes (e.g. main verb and satellite). If a verb does occur in both positions, a difference in meaning between the two positions would also be evidence for different word classes. He applies these criteria to Mandarin and concludes that second verbs in manner-path SVCs are satellites.

LAMBERT-BRÉTIÈRE (2009) applies Talmy's criteria to Fon and argues that this language too is satellite-framed. There is only a restricted set of path verbs that can occur as the second verb in a manner-path SVC. Moreover, some path verbs have different meanings when they are used as second verbs. Path verbs are selected from a closed class while manner verbs form an open class. Further evidence is that only the first verb can be inflected for aspect.

AMEKA & ESSEGBEY (2001) come to the opposite conclusion when studying Ewe and Akan SVCs. This is particularly interesting as Ewe is very closely related to Fon (both form part of the Gbe dialect continuum). Whereas the first verb is always inflected for aspect, the second verb may also bear aspectual marking, indicating that both equally have the status of verbs. They also show that negation can take scope over the first verb alone, the second verb alone or both verbs together, which shows that neither verb is syntactically subordinate to the other. This has also been found for Thai (ZLATEV & DAVID 2004), another serializing language in which manner verb and path verb have equal status.

In Avatime, there is no evidence that path verbs in manner-path SVCs are satellites. Most or all path verbs that can be used as single verbs also occur in manner-path SVCs. Out of 19 path verbs that occur as single verbs, 13 can be found in manner-path SVCs in my corpus. For the remaining six verbs there is no evidence whether or not they can occur in this position. There are no verbs that occur in manner-path SVCs but do not occur as single verbs. There are also no meaning differences between verbs used as single verbs and the same verbs used in SVCs.

The second verb of Avatime SVCs may carry reduced person and aspect marking, which is evidence for its verbal status. Examples can be seen in (15), repeated here as (21), where the second verb *mu* carries reduced person marking, and (22), where the second verb carries aspect marking.

- (21) *mè-se*            *è-mu*            *tréé*            *àmèdzòfe*  
 1S-run            1S-ascend        go:LOC        Amedzofe  
 'I ran up to Amedzofe.'(S0811291 WO)

- (22) *máâ-gâ*      *ðvanð* *o-dò*      *kivò*  
 1S.POT-move Vane POT<sup>6</sup>-move.out tomorrow  
 'I will go through Vane tomorrow.'  
 (S0811291 WO)

There is one case of possible grammaticalization of a path verb as a preposition. This is the verb *dɔ* 'move from'. An indication for grammaticalization is that it does not need to follow chronological order in SVCs with multiple path expressions (where one would expect the source-indicating verb to be the first path verb). When *dɔ* does not follow chronological order, it never carries the reduced person or aspect marking which would be evidence for verbal status. Another indication is the lack of tone-raising when it is used as a subsequent verb in an SVC without the reduced person or aspect marking. Normally, certain verbs, including *dɔ*, raise their tones when followed by a high tone. An example of this preposition-like use of *dɔ* can be seen in (23)<sup>7</sup>.

- (23) *èé-tre*      *ðholò* *dɔ*      *ðvanð*  
 C<sub>1</sub>S.PROG-go:LOC Ho move.from:LOC Vane  
 'He is going to Ho from Vane.'  
 (S0811121\_CG WO)

One of TALMY's (2009) criteria for determining main verb status is that the main verb should come from an open class. However, TALMY also emphasizes that not only motion constructions should be taken into account, but the entire range of verbs that can occur in that type of serial verb construction. This is something that LAMBERT-BRÉTIÈRE (2009) does not take into account when she claims that Fon path verbs form a closed class. Indeed, in Avatime too, path verbs form a closed class. However, manner-path SVCs are part of a larger class of manner-activity SVCs (DEFINA, in preparation). These also include constructions combining a posture verb and an activity such as (24).

- (24) *o-di*      *ɲwè*  
 C<sub>1</sub>S-sit drink  
 'He sits drinking.'  
 (R20110901\_DQ)

In this type of construction, the class of possible verbs in second position is much larger than that of first verbs. Moreover, even if we look only at motion verbs, it seems that the class of manner-of-motion verbs in Avatime is very small, possibly even smaller than that of path verbs (see Section 3.3).

All in all, the two verbs in Avatime manner-path SVCs have equal status. Path verbs are definitely functioning as full verbs, with perhaps the exception of the

<sup>6</sup> The potential marker on the second verb of serial verb constructions is different from the marking on the main verb. See Defina (in preparation) for more information on these reduced aspect markers.

<sup>7</sup> The tone on *dɔ* in this example is rising from high to extra high. The extra-high tone comes from the elided preposition *ní* (see Section 2.1). If tone-raising had taken place, the tone would have been extra-high on the whole word.

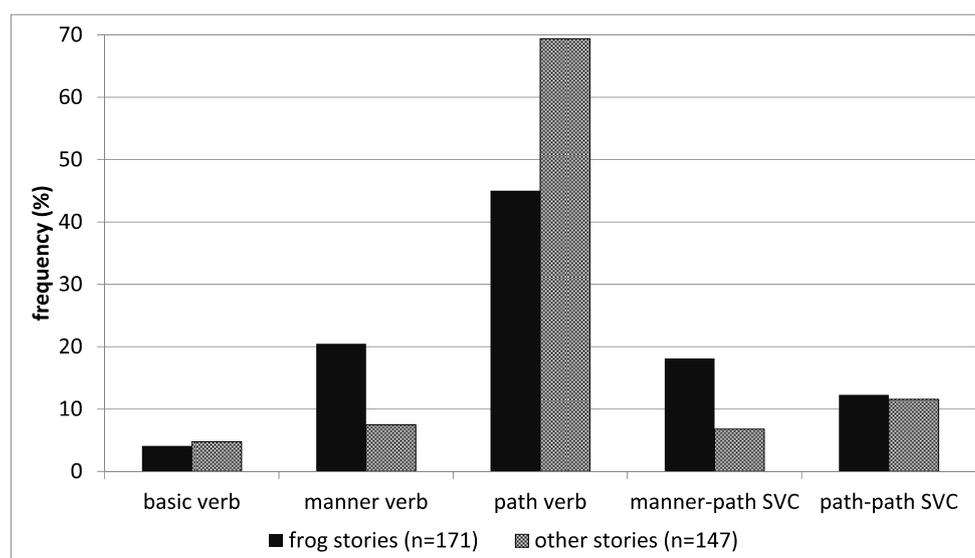
verb *dɔ* 'move from'. There is no evidence for the subordinate or dependent status of the path verb in these constructions. According to Talmy's (2009) criteria, Avatime is thus a truly equipollently framed language.

### 3. The use of motion constructions in narratives

#### 3.1 General overview

Now that we have established, using grammatical evidence, that Avatime is an E-language, the question is whether the use of motion constructions in Avatime narratives is similar to that in other E-languages. More specifically, is it similar to that in other serializing languages, the subgroup of E-languages to which Avatime belongs? To answer this question, I compared Avatime motion descriptions in narratives to those in two other serializing languages: Thai and Mandarin.<sup>8</sup> I also compared these languages to S-languages and V-languages.

Figure 1 shows the distribution of the different motion constructions in Avatime narratives. Numbers are indicated for the four frog stories and for a sample of 9 other narratives. The total number of motion expressions in the Avatime narratives is 318; the frog stories account for 171 of these and the other stories for 147. Appendix A shows the exact number of occurrences of each construction.



**Figure 1. The frequency of the different motion constructions in narratives.<sup>9</sup>**

<sup>8</sup> As we saw in Section 2.3, TALMY (2009) argues that Mandarin is satellite-framed. However, other authors analyze it as equipollently framed (CHEN & GUO 2010, SLOBIN 2004). Thai seems to be a clear example of an equipollently framed language (ZLATEV & YANGKLANG 2004, ZLATEV & DAVID 2004).

<sup>9</sup> The category 'basic verb' counts uses of the verb *ga* 'move' as a single verb. There are two occurrences of *ga* in serial verb constructions. These cases are added to the categories

Immediately striking about this data is the dominance of path-only constructions. In frog stories, these account for 45% of the motion expressions, in other stories for 69%. Even though manner-path SVCs should be easy to produce, they do not occur much in narratives. Path elaboration through the use of path-path SVCs is also rare.

This makes the Avatime pattern very different from that of Mandarin. In Mandarin, 71.5 % of the motion constructions in frog stories are manner-path SVCs (CHEN & GUO 2010). Manner verbs only account for 12.9 % of the constructions, path verbs alone and constructions with multiple path verbs together make up 10.6 %. The remaining 5.1 % consists of a deictic verb only. Thus, in Mandarin, motion SVCs are used much more frequently than in Avatime, whereas in Avatime path-only constructions are more frequent.

This data suggests that Avatime scores low on path elaboration, as it rarely combines multiple paths in SVCs. It also seems that manner saliency in Avatime is quite low, as manner verbs are used infrequently. This is contrary to what has been found for other serializing languages. In the next two sections, I will explore path/ground elaboration and manner saliency further.

### **3.2 Path and ground elaboration**

Two criteria that have been applied across a number of languages to measure path elaboration are (i) the number of clauses that contain a ground expression and (ii) the number of path elements expressed in the 'cliff scene' of the frog story. In this section I will discuss the results of these previous studies and compare these to the Avatime data.

#### *3.2.1 Number of ground expressions per clause*

In a language with more path elaboration, one would expect to find more ground elements being expressed than in a language with less path elaboration, as the path is essentially related to the ground.

SLOBIN (1996) compares ground expression in English and Spanish. As multiple path satellites can be combined in one clause in English, it is easier to combine multiple grounds within one clause. In Spanish, a path verb can combine with one or two grounds and only one path verb can occur per clause, thus we expect to find less ground expressions per clause in Spanish. This is indeed the finding. In Spanish and English novels, Slobin finds that expressions with three or more grounds per clause do not occur in Spanish, but form 9% of the English motion constructions. Two ground elements are mentioned in 26% of English motion constructions, but only 8% of the Spanish ones. This can be seen as a direct result of the grammatical structure of these languages. More striking is the difference between Spanish and English when all constructions that contain one or more ground expressions are taken together. These can be called plus-ground clauses.

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manner-path SVC and path-path SVC as it is clear what role *ga* plays in each of these constructions.



**Table 1. Proportion of motion expressions in frog stories that contains reference to the ground.**

Table 1 shows the proportion of plus-ground clauses in frog stories in the five languages discussed. This table also shows that there are considerable differences between the three serializing languages, which indicates that the framing pattern is not the only linguistic property that influences ground expression. IBARRETXE-ANTUÑANO (2009) comes to the same conclusion in a study of ground expressions in frog stories in 19 languages. The proportion of plus-ground clauses differs widely between different languages and does not seem to correlate strongly with framing pattern (no statistical tests for correlation have been done). Thus, other properties of the language influence ground expression as well.

### *3.2.2 Path elements in the cliff scene*

SLOBIN (1996, 1997) uses the 'cliff scene' of the frog story to study path elaboration in narratives. In this part of the frog story, the boy has been lifted up onto the antlers of a deer which then starts running towards a cliff. The dog is running next to them. When they reach the cliff, the deer drops the boy over the edge, the dog also falls over the edge and both end up in a river below. Slobin divides this scene into four segments and counts how many of these are expressed in languages of different types. He finds that speakers of S-languages (Dutch, English, German, Icelandic, Swedish, Polish, Russian and Serbo-Croatian) express about 3 segments on average, whereas speakers of V-languages (French, Portuguese, Spanish and Hebrew) express about 2. The difference must be related to general preferences for narration rather than the lexicalization pattern directly, as in both types of language it is possible to describe all path segments in this scene. The elements SLOBIN distinguishes are:

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

ZLATEV & YANGKLANG (2004) find that the serializing language Thai patterns with S-languages in this respect, as 80% of their frog stories contain 3 or more of these segments. AMEKA & ESSEGBEY (2001) find that all five Ewe speakers and three out of four Sranan speakers express 3 segments. The fourth Sranan speaker mentions only 2 segments. Interestingly, none of the Ewe and Sranan speakers express the second segment, using a verb like *stop*. AMEKA & ESSEGBEY note that all Ewe and Sranan speakers use a verb meaning arrive. This is counted as part of the first segment by SLOBIN, but perhaps a segmentation that counted arrive as the second segment would be more suitable to cover the Ewe and Sranan data. In any case, the number of segments expressed in Ewe and Sranan is higher than that in V-languages and similar to or higher than that in S-languages.

The Avatime results are very similar to those of AMEKA & ESSEGBEY. All four narrators express the first, third and fourth segments and none of them use a stop verb to express the second segment. Two of them do use the verb *na* 'reach' to express the arrival of the deer, boy and dog at the cliff. An example of the description of the cliff scene in Avatime can be seen in (26).

- (26) a. *gì be-se bèé-tré rrr*  
REL C<sub>1</sub>P-run C<sub>1</sub>P-go continuously  
'So when they ran and were going,'
- b. *gì be-na ku-po nu-i*  
REL C<sub>1</sub>P-reach C<sub>5</sub>S-valley opening-CM  
'when they reached the edge of a ravine,'
- c. *fèlèkadzèlèka-ε a-tì ɔ-nìvɔ-ε*  
deer-DEF C<sub>1</sub>S-put C<sub>1</sub>S-boy-DEF  
'the deer dropped the boy.'
- d. *anì kílè gí ka-drù-i tsyε kèé-se (o)nu-i*  
and how REL C<sub>6</sub>S-dog-DEF too C<sub>6</sub>S.PROG-run opening-CM  
'And how the dog too was running at the opening,'
- e. *ka tsyε kε-zě-wólí kunì ɔ-nìvɔ-ε petee ní ku-po mē*  
C<sub>6</sub>S too C<sub>6</sub>S-IT-fall follow C<sub>2</sub>S-child-DEF all LOC C<sub>5</sub>S-valley inside  
'it too went and fell after/following the child into the valley.'
- f. *étepɔ ku-pó kɔ-lo ɔ-nìpɔ-lo ɔ-lí ní*  
meanwhile C<sub>5</sub>S-valley C<sub>5</sub>S-that C<sub>2</sub>S-river-DEF C<sub>2</sub>S-be.at LOC  
*ke-se-à ηwii*  
C<sub>6</sub>S-ground-DEF far.away  
'Meanwhile, in that valley there is a river, on the ground far away.'
- g. *bé-wólí ku ní ku-po mē*  
C<sub>1</sub>P-fall arrive LOC C<sub>5</sub>S-valley inside  
'They fell into the valley.' (frog\_SO)

With regard to path elaboration in a larger stretch of discourse, Avatime thus patterns with other serializing languages and with S-languages. That would suggest that, even though motion SVCs are not frequently used in Avatime, the fact that they are possible influences the narrative strategy used by its speakers. However it must be noted that the comparison of narrations of this scene alone cannot be enough to draw strong conclusions. The expression or otherwise of a certain segment may just as well be due to particularities of the language. Even though SLOBIN (1997) compares quite a large sample of languages, many of these are closely related. In fact, IBARRETXE-ANTUÑANO (2009) finds that when more different languages are taken into account, there is a gradual cline from expressing very few segments to expressing all segments. Satellite-framed languages, verb-framed languages and equipollently framed languages do not form distinguishable groups on this cline. Perhaps comparing several different scenes would yield a clearer result. All in all it seems that framing pattern is not the only influence on path elaboration in narratives.

### 3.2.3 Interim summary

The two different ways of looking into path elaboration show quite different results for Avatime, as well as for other serializing languages. The proportion of plus-ground clauses in Avatime frog stories is even lower than that in Spanish, which is in turn lower than that in English. Avatime is similar to other serializing languages in this respect. A tentative explanation is that the heaviness of SVCs describing sequential actions leads to the avoidance of such constructions, just like the heaviness of multiple clauses leads to the avoidance of complex path descriptions in V-languages (SLOBIN 1996). This in turn leads to a dispreference for ground expression in narratives, which makes Avatime more similar to V-languages than to S-languages in this respect.

Path expression in a larger stretch of discourse shows more similarity between Avatime and S-languages. Speakers of Avatime use a narrative style in which path is described in considerable detail, as opposed to speakers of V-languages.

There thus seems to be a dispreference for ground expression in Avatime narratives, even though there is a preference for the detailed expression of path in general. This pattern is different from findings for both S-languages and V-languages, though it seems to be typical for serializing languages.

It must be noted however, that framing pattern is not the only factor influencing path elaboration and perhaps not even the most important one. Moreover, studies based on more than just one frog story scene are necessary to consolidate the findings on complex path expression.

## 3.3 Manner saliency

### 3.3.1 Manner verb in the owl's emergence

Another scene from the frog story has been used as an indicator of manner saliency in a language. This scene consists of two pictures: in the first we see the boy standing on a tree branch, looking into a hole in a tree and in the second we see an owl standing in the opening of the hole with its wings spread, while the boy has fallen from the tree. SLOBIN (2004) finds that speakers of V-languages never or hardly ever express manner when describing the 'exit' of the owl, thus concentrating on the path only. Speakers of S-languages do use manner verbs, though the frequency with which manner verbs are used to describe this scene is very different among S-languages. Dutch and German use a manner verb less than 20% of the time, English about 30%, and Russian 100%. The two serializing languages Mandarin and Thai fall in between Germanic and Russian with 40% and 60% respectively. SLOBIN explains the low usage of manner verbs in Germanic as the result of a competition between expressing manner and expressing deictic information (fly out vs. come out). Most speakers end up choosing to express deictic information. In Russian, deictic information rather competes with other path information as both are encoded in prefixes and only one prefix is possible (come-fly vs. out-fly). Manner information has to be encoded. In Mandarin and Thai, deictic information does not compete with path or manner for the same slot (see

Section 2.2). At the same time, manner information is not obligatory, as a single path verb can be used. Thus, these two languages occupy a middle space.

This explanation sounds very reasonable, but does not work in the light of the Avatime data. None of the four frog story narrators used a manner verb to describe the owl's emergence. They invariably used the verb *dò* 'move out', even though a manner-path SVC could have been used (27). The reason for omitting the manner verb cannot be to express deixis, as a non-deictic path verb is used and moreover, deixis could have been expressed together with manner.

- (27) *àdze ka-dzàia bidi átò ke-dò ní ò-se-lo mè*  
 witch C<sub>6</sub>S-bird big INDF C<sub>6</sub>S-move.out LOC tree-DEF inside  
 'A certain big owl came out of the tree.' (frog\_100719\_DQ-PhA)

Of course a total of four frog stories is a very small sample and I do not exclude the possibility that in a larger sample manner-path SVCs would occur. However, two languages related to Avatime show similar results. In closely related and neighboring Nyangbo (ESSEGBEY, 2008) none of the 6 children and 3 adults who told the frog story used a manner verb to describe the owl's emergence. In more distantly related Fon (LAMBERT-BRÉTIÈRE, 2009) only one out of an unmentioned number of narrators used a manner-path SVC to describe the owl's emergence. Thus, it seems that we can at least tentatively conclude that Kwa languages behave differently in this regard to Thai and Mandarin. The latter seem to have a high manner saliency, as expected based on the framing pattern. Manner saliency in Avatime on the other hand seems to be rather low.

### 3.3.2 Manner verb lexicon

Another method to look into manner saliency is to study the inventory of manner verbs in a language. SLOBIN (1996, 1997) finds that S-languages tend to have a large lexicon of manner verbs, including many semantically detailed and expressive verbs, such as *creep, march, plummet, scramble, scuttle, swoop* and *trot*. V-languages on the other hand have a more basic and restricted manner verb lexicon. This is also reflected in stories, which show a greater diversity of manner verbs when told in S-languages.

Interestingly, ZLATEV & YANGKLANG (2004) show that Thai also has a large lexicon of manner verbs. Some examples are *kracoon* 'leap', *kâaw* 'stride' and *hêe* 'parade'. In a corpus of 50 Thai frog stories, 20 different manner verbs were used and 22 different verbs that encode both manner and path (such as 'pop out' and 'crawl under'). CHEN & GUO (2010) find 44 different manner verbs in their corpus of 12 Mandarin frog stories. It thus seems again that Thai and Mandarin have a high manner saliency. This is also SLOBIN's (2004) conclusion. He explains this as a result of the framing pattern: because it is 'easy' to express both manner and path in a serial verb construction, manner information will usually not be left out and the semantic domain of manner is thus elaborated.

Again, this explanation cannot work in the light of the Avatime data. The Avatime manner verb lexicon seems to be rather small. In the four frog story



Thus, manner ideophones do not take on the same function as manner verbs do in English. They might be more like adverbs in S-languages or V-languages, which can also be used to specify manner in more detail, but do not influence the narrative patterns. Thus, like speakers of V-languages, Avatime speakers do not express manner of motion unless it is important. Detailed distinctions can be made, thanks to manner ideophones, but are not regularly made in narratives.

#### 4. Conclusion

In this paper I have studied the encoding of motion in the grammar and lexicon of Avatime. I have also investigated how motion events are described in narratives.

To combine manner and path in Avatime motion expressions, serial verb constructions are used. As the two verbs in these constructions have equal status, Avatime can be classified as an equipollently framed language. There are however some differences with other serializing (equipollently framed) languages when it comes to the expression of multiple grounds and deixis. The question is whether E-languages behave as one group with respect to the expression of motion in narratives. My results show that they do not.

When it comes to path and ground elaboration, Avatime patterns similarly to other serializing languages. These languages show low ground expression but detailed path elaboration in longer stretches of discourse. Path elaboration is supposedly related to the (im)possibility of combining multiple path elements in a single clause. This tends to be possible in S-languages but not in V-languages. In Avatime, multiple path elements can be combined easily in a serial verb construction. However, if sequential paths with multiple ground elements are to be expressed, a different, less tightly integrated type of SVC is needed. This could be an explanation for the deviating pattern of Avatime, and perhaps for other serializing languages as well. These languages thus look quite similar to V-languages, where expressions with multiple grounds are also avoided because of their "heaviness" (SLOBIN 1996). Further investigation is needed to see whether Mandarin and Thai also make a difference between more and less tightly integrated serial verb constructions<sup>10</sup>. There are also doubts about whether path elaboration is related to framing pattern at all, raised by IBARRETXE-ANTUÑANO (2009). In any case, studying a single frog story scene to investigate path elaboration does not seem to be enough and other comparative methods might have to be used.

Avatime is different from other serializing languages and strikingly similar to V-languages with respect to manner saliency. Whereas manner saliency is high in S-languages and in Mandarin and Thai, it is low in V-languages and in Avatime. To explain the high manner saliency in Mandarin and Thai, SLOBIN (2004) refers to the ease with which serial verb constructions can be processed. Manner and path can thus easily be combined in these languages, just like in S-languages. On the other hand, we could also argue that manner-path constructions in serializing languages are more difficult to process than path-only constructions, as they are more complex - after all path-only constructions require only one verb and manner-

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<sup>10</sup> JORDAN ZLATEV (p.c.) suggests that this analysis may also apply to Thai.

path constructions require two. This would cause low manner saliency in serializing languages. An argument along these lines would work for Avatime, in which manner expressions are not frequent and path-only constructions are preferred. This is reflected in the small manner verb lexicon. However, this does not explain the difference between Avatime (or Kwa more generally) on the one hand and Thai and Mandarin on the other hand. Perhaps the difference is related to the availability of manner ideophones in Avatime or to the general tendency for Kwa languages to have a small verb lexicon (FELIX AMEKA, p.c.). In any case it is evident that the framing pattern alone does not determine manner saliency in serializing languages.

My results as compared to findings for other languages are summarized in table 3. All in all, when we look at grammatical criteria, Avatime is a clear example of an E-language, but looking at motion expression in narratives, it has more in common with V-languages. Especially striking is the low manner saliency, which makes Avatime different from other serializing languages. With respect to the expression of motion in narratives, equipollently framed languages can thus not be said to form a single type.

	satellite- framed	verb- framed	Akan / Ewe / Sranan	Fon	Mandarin Chinese	Thai	Avatime
path- lexicalization subordinate category	satellite	verb	verb	verb /satellite	verb (/ satellite?) path / neither	verb	verb
plus-ground clauses	path 82% (English)	manner 63% (Spanish)	neither -	path -	neither 63%	neither 47%	neither 53%
path segments in cliff scene	3	2	3	-	-	3	3
manner-verb in owl's exit	yes	no	-	rare	yes	yes	no
manner-verb lexicon	large(st)	small	-	-	large	large	small

**Table 3. Comparison of motion expression across languages**

## Appendix A.

	frog stories only	frog stories only (%)	other stories	other stories (%)	all stories	all stories (%)
basic verb	7	4.1	7	4.8	14	4.4
manner verb	35	20.5	11	7.5	46	14.5
path verb	77	45.0	102	69.4	179	56.3
manner-path SVC	31	18.1	10	6.8	41	12.9
path-path SVC	21	12.3	17	11.6	38	11.9
Total	171	100	147	100	318	100

**Table 4. Motion constructions in Avatime narratives.**

### Abbreviations

C <sub>number</sub>	noun class (number)
CM	clause marker
REL	relativizer
CTR	contrast
DEF	definite
DIST	distal demonstrative
HAB	habitual
IT	itive
LOC	locative
INDF	indefinite
P	plural
POT	potential
PROG	progressive
PROX	proximal demonstrative
S	singular
SVM	serial verb marker
SUBJ	subjunctive
VEN	ventive

### Acknowledgments

This research was made possible by a field trip grant (FTG0145) from ELDP. Many thanks to all the Avatime speakers who worked with me and allowed me to record them, especially Charlotte Adzoyo Bakudie and Samuel Kwami Oboni. This paper is based on the thesis I wrote as part of the Research Master in Linguistics at Leiden University. I owe much gratitude to Felix Ameka for his great supervision. The fieldwork that this paper is based on was carried out together with Rebecca Defina, to whom I also owe much gratitude for commenting on earlier versions of this paper. Thanks as well to Dejan Matić and Jordan Zlatev for commenting on earlier versions of this paper.

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