

Serial Verb Constructions and Motion Events in Malagasy

Nathan Dwyer

Abstract

This article investigates how Malagasy, an Austronesia language of Madagascar, expresses path and manner in motion event expressions, and situates Malagasy within a motion event typology introduced by Talmy (1985) and expanded by Slobin (2004) and Zlatev & Yangklang (2004). I argue that Malagasy is a verb-framed language within Talmy's (1991) verb framing/satellite-framing typology. I examine Malagasy dual-verb constructions and show points of comparison and contrast to canonical serial verb constructions (SVCs). While it is debatable whether Malagasy dual-verb constructions are legitimate SVCs, I argue that Malagasy does not align with a third category unique to SVC languages proposed by Slobin (2004) and Zlatev & Yangklang (2004), but instead behaves as a verb-framed language. Additionally, I examine a phenomenon in verb-framed languages whereby the telicity of a path phrase changes depending on whether the associated verb is a path verb. Consequently, I propose a new definition of the *boundary-crossing constraint*. This article constitutes the first investigation of Malagasy motion event expressions in comparison with SVC languages and its findings motivate a reconsideration of presumed universal properties of motion event expressions in SVC languages.

1 Background

According to Leonard Talmy's (1985) typology of motion events, verbs of motion in a given language will either encode the manner of motion or the path of motion, but not both. Whichever piece of information (manner or path) is not encoded in the main verb of a motion expression will either be left out or expressed using some other element, such as a participle. This distinction can be seen in comparing the following example from Spanish to its English translation (adapted from Talmy, 1985:69):

- (1) *La botella pasó por la piedra (flotando)*
 the bottle passed by the rock (floating)
 'The bottle floated past the rock.'

In Spanish, the main verb *pasó* 'passed' encodes the path of motion (in addition to the fact of motion). The manner of motion is optionally included using a participle, *flotando* 'floating'. In English, however, the main verb 'floated' encodes the manner of motion. Thus, Spanish is a path language and English is a manner language.

In a later work, Talmy (1991) introduces the related concept of verb-framed languages and satellite-framed languages. He claims that "languages fall into two typological categories on the basis of where they characteristically express the schematic core of the framing event -- in the verb or in a satellite to the verb" (Talmy, 1991:480). In motion events, the "schematic core of the framing event" is the path of the motion. Thus path languages like Spanish are verb-framed, and manner languages like English are satellite-framed.

Recently, attention has been paid to languages with Serial Verb Constructions (SVCs) and their place in Talmy's typology. Languages exhibiting Serial Verb Constructions can have sentences with multiple consecutive verbs which are parallel in structure. In such a construction, no single verb can be distinguished as the main verb of the sentence; the meaning of the VP is derived from the verb complex as a whole. An example of a language that uses SVCs to express motion events is Vietnamese (Slobin & Hoiting, 1994:492):

- (2) *Lan chạy vào vườn*
 Lan run enter garden
 'Lan ran into the garden.'

Opinions differ as to how such languages fit into Talmy's verb-framed/satellite-framed dichotomy. Slobin & Hoiting (1994) argue that SVC languages "can all be characterized as **complex verb-framed languages**, in contrast to the more familiar **simplex verb-framed languages** described by Talmy" (492, author's emphasis). In their 2004 study of motion event expressions in Thai, Zlatev & Yangklang offer a different analysis of languages with SVCs. They propose a third category (neither verb-framed nor satellite-framed), wherein "there is no syntactic or semantic evidence that either type [of motion verb] is subordinate to the other, and therefore they need to be given equal status" (Zlatev & Yangklang, 2004:161). Slobin (2004) concurs with Zlatev & Yangklang's assessment of SVC languages.

After the Malagasy data has been presented and discussed, I will revisit Zlatev & Yangklang (2004) and Slobin's (2004) proposal of a third category in section 3.

1.1 Serial Verb Constructions in Malagasy?

Malagasy exhibits constructions with two parallel verbs, as shown in the example below (adapted from Kalin & Keenan, 2011):

- (3) *M-ihinana m-itsangana Rabe*
 PRS-eat.AV PRS-stand.AV Rabe
 'Rabe eats (while) standing up.'

Here, the verbs 'eat' and 'stand' are structurally similar, both appearing as present tense verbs in the agent voice (Malagasy is a VOS language with a three-"voice" system, with different voices being used when the subject/trigger is an agent, patient, or instrument; see Pearson (2005)). The two verbs share a subject, *Rabe*.

It has been claimed that Malagasy is an SVC language that serializes over TP (such that serialized verbs can be negated and marked for tense independently of each other), while most (all?) other SVC languages serialize over VP or AgrP (Kalin & Keenan, 2011). In that case, it would be worthwhile to bring Malagasy data to bear on this debate about serial verb constructions and motion event typology, as Malagasy's use of this alternative serializing strategy offers a potentially different perspective on suspected SVC-language universals.

However, it is debatable whether Malagasy constructions such as in (3) and (4) below can be considered serial verb constructions. Haspelmath (2016), for one, would object to this label. He proposes that one universal of serial verb constructions is that they are monoclausal, and he suggests lack of independent negation as a test for clausehood, and by extension, SVC status (Haspelmath, 2016:298-301). By this definition, the Malagasy construction in (4) below is not a serial verb construction, as its two verbs can be independently negated as in (5).

- (4) *M-itsikafona n-andalo ny vato ny tavoahangy*
 PRS-float PST-pass_by DET rock DET bottle
 'The bottle floated past the rock.'
- (5) *M-itsikafona tsy n-andalo ny vato ny tavoahangy*
 PRS-float NEG PST-pass_by DET rock DET bottle
 'The bottle floats without passing the rock.'

This is different from canonical SVC languages like Vietnamese and Thai, possibly so different that it cannot meaningfully be called an instance of the same construction. For the purpose of this paper, I will set aside the dilemma of whether Malagasy has serial verb constructions serializing over TP, or whether it lacks SVCs. What is relevant here is that the sentence in (4) expresses *a single motion event*; that is, it is parallel to its English translation and to the Spanish sentence in (1). Therefore, it is meaningful to compare this Malagasy construction to its English and Spanish counterparts and to consider how it fits into Talmy's typology.

2 Motion Events in Malagasy

The main characteristic that determines whether a language is verb-framed or satellite-framed is the encoding of the ‘core schema’ - in the case of motion expressions, the core schema is the path of motion (Talmy, 1991:480). Several other structural characteristics pattern with the core schema expression;¹ these are summarized in Table 1, adapted from Zlatev & Yangklang (2004:187). Explanations of each parameter follow in sections 2.1-2.3.

Table 1: Structural characteristics of verb-framed and satellite-framed languages

Parameter	V-language	S-language
Core schema (path) expression	verb	satellite
Co-event (e.g., Manner) expression	adverbial	verb
Boundary-crossing constraint	yes	no

Thus, if Malagasy is a verb-framed language, it would be expected (1) that path is expressed in verbs, not satellites; (2) that manner is expressed in adverbial phrases, not verbs; and (3) that the boundary-crossing constraint applies. In this section, each of these three aspects will be analyzed in turn.

2.1 Core Schema (Path) Expression

As noted above, the core schema of motion expressions is the path of motion (Talmy, 1991:480). In verb-framed languages, the core schema is encoded in a verb, whereas in satellite-framed languages, the core schema is encoded in a satellite. The satellite is defined as “the grammatical category of any constituent other than a nominal complement that is in a sister relation to the verb root” (Talmy, 1991:486).

The Spanish example in (1) is repeated below as (6):

- (6) *La botella pasó por la piedra (flotando)*
 the bottle passed by the rock (floating)
 ‘The bottle floated past the rock.’

¹ Zlatev & Yangklang (2004) also identify several discourse characteristics which pattern differently in verb-framed languages and satellite-framed languages. These discourse characteristics are outside the scope of this paper.

This motion event is expressed in Malagasy like this:

- (7) (M-itsikafona) *n-andalo* *ny vato ny tavoahangy*
 (PRS-float.AV) PST-pass_by.AV DET rock DET bottle
 'The bottle floated past the rock.'

Here, path is encoded in a verb, *n-andalo* 'pass by', and the manner expression, *m-itsikafona* 'float', is optional. This is like in Spanish, where the main verb is a path verb *pasó* 'moved by/passed'. In terms of manner and path encoding the Malagasy sentence is unlike its English translation; In English, the main verb is the manner verb 'floated', and the path is encoded in the satellite 'past'.

In Malagasy, as in Spanish, if the manner verb is made to stand as the sole (main) verb, the result is ungrammatical:

- Spanish: (8) **La botella flotó por la piedra.*
 Malagasy: (9) **Mitsikafona* (PREP/LOC) *ny vato ny tavoahangy.*²

The ungrammatical expressions in (8) and (9) are syntactic calques of English where the path is not expressed in a verb. These examples demonstrate that, in Malagasy as in Spanish, the path of the figure (here, the bottle) with reference to the ground (here, the rock) cannot be expressed without a path verb.

Thus, the core schema of motion expressions in Malagasy is obligatorily expressed by a verb, as expected from verb-framed languages.

2.2 Co-Event (Manner) Expression

In manner languages, the manner is expressed in a main verb, whereas in path languages, the manner is expressed in an optional adverbial phrase. In Malagasy, however, the manner is expressed as a predicate. Malagasy lacks participles and non-finite verb forms (cf. Spanish *flotando* 'floating', English gerunds), and expresses manner as intransitive Agent Voice verbs (like in (7) above). I propose that such manner expressions in Malagasy are depictive secondary predicates and more closely resemble Spanish manner participles than English verbs of manner.

In (10) it is shown that the manner verb *mitsikafona* 'float' can appear after the subject, in modifier position. In this position, the verb is translated into English as a non-finite verb form, 'floating'.

- (10) *N-andalo* *ny vato ny tavoahangy* {*mena* / *m-itsikafona*}
 PST-pass_by.AV DET rock DET bottle {red / PRS-float.AV}
 'The red/floating bottle passed the rock.'

² This sentence is also ungrammatical because *mitsikafona* 'to float' is intransitive, and thus cannot accommodate *ny vato* 'the rock' as an object/patient argument. However, even if *ny vato* were incorporated as an oblique (with a preposition or locative element), the intended reading would not obtain. In Malagasy, as in Spanish, no sentence with the figure and ground expressed as arguments of a lone manner verb can mean 'the bottle floated past the rock'.

In (11), the manner verb appears before the subject. This sentence only produces the intended reading if there is a long pause: *Nandalo ny vato – mitsikafona ny tavoahangy*. Without this pause, the consultant reports that “it means the rock is floating.” This is shown in (12). The brackets in (11), then, show the demarcation of the two predicates, and in (12) the parentheses show that the verb *mitsikafona* describes *ny vato*, not *ny tavoahangy*.

- (11) [TP₁ *Nandalo ny vato*] [TP₂ *mitsikafona ny tavoahangy*
 PST-pass_by.AV DET rock PRS-float.AV DET bottle
 ‘The bottle floated past the rock.’
- (12) #[TP *Nandalo (DP ny vato mitsikafona) ny tavoahangy*
 PST-pass_by.AV DET rock PRS-float.AV DET bottle
 ‘The bottle passed the floating rock.’

I propose that the manner expression in (11) is best described as a depictive secondary predicate. The path predicate *nandalo ny vato* ‘passed the rock’ encodes the core schema, and the optional manner predicate *mitsikafona* ‘floating’ describes the subject. *Nandalo* ‘passed by’ encodes the relationship between the bottle and the rock, and *ny vato* ‘the rock’ receives its theta role from *nandalo*. *Mitsikafona* ‘floating’ is optional, and describes the subject. So the path verb is the main predicate, and the manner verb is a depictive secondary predicate.

Somewhat surprisingly, the manner verb can also appear *in between* the path verb and its direct object:

- (13) *N-andalo m-itsikafona ny vato ny tavoahangy*
 PST-pass_by.AV PRS-float.AV DET rock DET bottle
 ‘The bottle passed the rock, floating.’

This construction, and the ungrammaticality of (9), suggest that the manner verb is subordinate to the path verb here. In (13), *mitsikafona* ‘float’ behaves like an adverbial adjunct, describing the path-focused action (i.e. modifying *nandalo* ‘pass by’).

It seems that Malagasy does not fit neatly into the dichotomy expected of manner-languages and path-languages, whereby manner languages express manner in the verb, and path languages express manner in an optional adverbial phrase. Malagasy’s only strategy to encode manner is by using a verb. However, these verbal manner expressions are optional and subordinate to the main path verb. The use of depictive secondary predicates of manner in Malagasy is more similar to the use of optional manner participles in Spanish than the use of main verbs of manner in English. Here, too, Malagasy behaves like a verb-framed language.

2.3 Boundary-Crossing Constraint

Zlatev & Yangklang (2004) say that, according to the *boundary-crossing constraint*, “Manner verbs cannot be used to describe situations in which a boundary is crossed” (2004:168). They cite Slobin & Hoiting (1994) as the origin of this constraint. However, Slobin & Hoiting never

explicitly define the boundary-crossing constraint. They discuss apparent counterexamples (reproduced below) to Talmy's path-language/manner-language dichotomy, wherein path languages exhibit "path-focus clauses with a main verb of manner of motion and an adverbial path phrase" (Slobin & Hoiting, 1994:494).

Spanish:

- (16a) *El hombre entró corriendo a la casa.*
'The man entered running to the house.'
(16b) *El hombre corrió hasta la casa.*
'The man ran up.to the house.'

French:

- (17a) *L'homme est entré dans la maison en courant.*
'The man entered the house in running.'
(17b) *L'homme a couru jusqu'à la maison.*
'The man ran up.to the house.'

Turkish:

- (18a) *Adam koşarak eve girdi.*
'Man running house-DAT entered.'
(18b) *Adam eve kadar koştu.*
'Man house-DAT up.to ran.'

In each of these examples, the first sentence means 'The man ran into the house,' while the second means 'The man ran up to the house.' In English, both sentences have 'run' as the main verb; as a satellite-framed language, English doesn't follow the boundary-crossing constraint.

In the data in (16)-(18) above, it seems that main verbs of manner can only be used with locative path adverbials, whereas motion event expressions involving a crossing of a boundary require path verbs. Slobin & Hoiting liken the two types of path expressions to Aske's "mere locative path phrases" and "telic path phrases", respectively (Aske, 1989:6). With this in mind, I'm using a different definition of *boundary-crossing constraint* than Zlatev & Yangklang:

- (19) *Boundary-crossing constraint: boundary-crossing path phrases can only be licensed by path verbs.*³

³ This definition also differs from Slobin (2004), who says "It appears that V-languages only license the use of a manner verb as a main verb in a path expression if no boundary-crossing is predicated" (7). His formulation makes it difficult to assess languages with SVCs, as it is unclear how the notion of "main verb" applies to them. It seems that what matters in assessing whether a language follows the boundary-crossing constraint, and what differentiates V-languages and S-languages, is whether an expression with a lone manner verb can produce a telic/boundary-crossing reading, or whether this requires a path verb.

Malagasy follows this boundary-crossing constraint, as can be seen in the data below.

- (20a) *N-ihazakazaka n-iditra ao an-tsekoly aho*
 PST-run.AV PST-enter.AV here LOC-school 1s.NOM
 'I ran into the school.'
- (20b) *N-iditra ao an-tsekoly aho*
 PST-enter.AV here LOC-school 1s.NOM
 'I entered the school.'
- (20c) *N-ihazakazaka ao an-tsekoly aho*
 PST-run.AV here LOC-school 1s.NOM
 'I ran in the school.'
 *'I ran into the school.'
- (20d) *N-ihazakazaka ho any an-tsekoly aho*
 PST-run.AV IRR there LOC-school 1s.NOM
 'I ran (up) to the school.'

In the data in (20a-d), only (a) and (b) express boundary-crossing events, and these both have the path verb *niditra* 'enter'. A comparison of (a) and (b) shows that manner can optionally be expressed, using the verb *nihazakazaka* 'run'. If this manner verb in (a) is not included, the resulting sentence (b) still results in a telic reading. However, if the *path* verb is removed from (a), the result, (c), does not allow a telic reading. This sentence (c) means only 'I ran in the school', like on an indoor track, for example. It cannot mean 'I ran into the school'; as there is no path verb, this sentence cannot imply a boundary-crossing.

Compare the Malagasy data in (20) with the equivalent French expressions in (21):

- (21a) *Je suis entré dans l'école en courant*
 'I ran into the school.'
- (21b) *Je suis entré dans l'école*
 'I entered the school.'
- (21c) *J'ai couru dans l'école*
 'I ran in the school.'
 *'I ran into the school.'
- (21d) *J'ai couru jusqu'à l'école*
 'I ran to the school.'

Here we see nearly perfect parallels with the Malagasy constructions in (20). The manner expression *en courant* 'running' in (21a) can be left out without changing the nature of the path expression. However, replacing the path verb in (21b) with a manner verb and using the same adverbial path phrase results in a stative/atelic reading, shown in (21c). Finally, encoding the telic and atelic (boundary crossing/non-boundary crossing) meanings of '(in)to the school' require different adverbial phrases in both languages.

In (20a-c) the adverbial phrase *ao an-tsekoly* 'here LOC-school' alternatively means 'into the school' or 'in the school' depending on the verbal context. In other words, the same phrase can encode a "mere locative path phrase" or a "telic path phrase" depending on the verb, and the

“telic path phrase” meaning can only be licensed by a path verb. This differs from English, a satellite-framed language, where the telicity or boundary-crossing quality of the motion is encoded in a satellite, and the same verb is used in both expressions. In the examples below, the element that gives rise to the boundary-crossing interpretation is shown in bold:

French: *Je suis **entré** dans l'école.*
J' ai couru dans l'école.
 Malagasy: ***Niditra** ao an-tsekoly aho.*
Nihazakazaka ao an-tsekoly aho.
 English: *I ran **into** the school.*
I ran inside the school.⁴

Regardless of the precise definition of the boundary-crossing constraint, Malagasy patterns with verb-framed languages (like those shown in (16)-(18) above) in its expression of telic/boundary-crossing motion events.

3 Conclusion

The conclusions from section 2 are summarized in the table below:

Table 2: Structural characteristics of verb-framed languages, satellite-framed languages, and Malagasy

Parameter	V-language	S-language	Malagasy
Core schema (path) expression	verb	satellite	verb
Co-event (e.g., Manner) expression	adverbial	verb	secondary predicate
Boundary-crossing constraint	yes	no	yes

Across all three of these dimensions, Malagasy patterns as a verb-framed language. If Malagasy is to be considered a Serial Verb Construction language, then this shows that not all SVC languages are alike in their relation to Talmy's typology. The Malagasy data do not provide evidence for Zlatev & Yangklang's (2004) third category, at least as far as these three structural characteristics go. Perhaps the discourse characteristics of Malagasy motion events differ from V-

⁴ It is worthy of note that for “I ran **inside the school**” in English, the adverbial (satellite) phrase (in bold) can be interpreted as *either* a locative path phrase or a telic path phrase. However, a main verb of manner (here, “run”) is not incompatible with the telic reading, thus violating the boundary-crossing constraint, as expected for a satellite-framed language.

language patterns as Thai and other SVC languages apparently do (cf. Zlatev & Yangklang, 2004:187), and this is a potential topic for future research.

The motion event expressions in Malagasy and in SVC languages show that terms like “main verb” must be used carefully and precisely when formulating predictions of motion event typologies. Statements like “languages fall into two typological categories on the basis of where they characteristically express the schematic core of the framing event - in **the verb** or in a satellite to **the verb**” (Talmy, 1991:480, emphasis added) assume that “the verb” can be unambiguously identified in a motion event expression - for Malagasy, it is not so straightforward. I have demonstrated that if our definition of *boundary-crossing constraint* assumes that a motion event expression will only have one verb, it causes problems when applied to languages that do not follow this assumption. Nevertheless, I have shown that it is possible to compare languages with radically different syntactic strategies for encoding motion events, even when a surprising diversity in constructions demands a reconsideration of definitions or frameworks.

References

- Aske, Jon. (1989). "Path Predicates in English and Spanish: A Closer Look". *Proceedings of the Fifteenth Annual Meeting of the Berkeley Linguistics Society*. pp. 1-14.
- Haspelmath, Martin. (2016). "The Serial Verb Construction: Comparative Concept and Cross-linguistic Generalizations". *Language and Linguistics* 17(3). pp. 291-319.
- Kalin, Laura & Ed Keenan. (2011). "Serial Verbs in Malagasy?" *The 18th Meeting of the Austronesian Formal Linguistics Association*.
- Pearson, Matt. (2005). "Voice Morphology, Argument Structure, and Case in Malagasy". *Proceedings of AFLA 11*. pp. 229-243.
- Slobin, Dan I. & Nini Hoiting. (1994). "Reference to movement in spoken and signed languages: Typological considerations". *Proceedings of the Twentieth Annual Meeting of the Berkeley Linguistics Society: General Session Dedicated to the Contributions of Charles J. Fillmore*. pp. 487-505.
- Slobin, Dan I. (2004). "The many ways to search for a frog: Linguistic typology and the expression of motion events". In S. Strömquist & L. Verhoeven (Eds.), *Relating events in narrative: Vol. 2. Typological and contextual perspectives*. pp. 219-257.
- Talmy, Leonard. (1985). "Lexicalization patterns: Semantic structure in lexical forms". In T. Shopen (Ed.), *Language typology and lexical description: Vol. 3. Grammatical categories and the lexicon*. pp. 36-149.
- Talmy, Leonard. (1991). "Path to Realization: a Typology of Event Conflation". *Proceedings of the Seventeenth Annual Meeting of the Berkeley Linguistics Society: General Session and Parasession on The Grammar of Event Structure*. pp. 480-519.
- Zlatev, Jordan & Peerapat Yangklang. (2004). "A third way to travel: The place of Thai in motion-event typology". In S. Strömquist & L. Verhoeven (Eds.), *Relating events in narrative: Vol. 2. Typological and contextual perspectives*. pp. 159-190.