# The serial verb construction: Comparative concept and cross-linguistic generalizations

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Since the 1970s, serial verb constructions (SVCs) have been discussed widely in African, Oceanic and many other languages in different parts of the world. This paper gives an overview of the most important generalizations about serial verb constructions that have been proposed and that do seem to hold if a sufficiently restrictive definition of the concept is adopted. The main problem of the earlier comparative literature is that the notion of a SVC has not been delimited clearly, and/or has been formulated in much too wide terms. This can be seen as a result of the confusion between comparative concepts and natural kinds: Serial verb constructions have (most often implicitly) been regarded as natural kinds (universal categories), so that phenomena in additional languages were regarded as SVCs even when they had somewhat different properties. This procedure inevitably leads to a fuzzy and very broad understanding of the concept, with a prototype structure that does not allow falsifiable claims. Here I propose a narrow definition of SVC and formulate ten universals that are apparently true of all serial verb constructions in this narrow sense.

# 1. Introduction

# 1.1. The serial verb construction as a comparative concept

The concept of a serial verb construction, as illustrated by (1a-e), is by now deeply entrenched in the practice of descriptive linguists and comparative syntacticians (e.g. Stewart 2001; Aikhenvald & Dixon (eds.) 2006; Bisang 2009). In this paper, I propose a very explicit definition of this comparative concept, and I suggest a number of cross-linguistic generalizations that can be made over phenomena that fall under this definition.

- (1) a. Dagaare (Gur; Hiraiwa & Bodomo 2008: 796) *d dà sé lá nénè 55*35G PST roast FOC meat eat
  'He roasted meat and ate it.'
  - b. Cantonese (Matthews 2006: 75)  $keoi^{5}$   $haam^{3}$ - $sap^{1}$ -zo go  $zam^{2}tau^{4}$ she cry-wet-PFV CLF pillow 'She made her pillow wet by crying.'
  - c. Nêlêmwa (Oceanic; Bril 2004: 176) *I* fuk ulep daxi ni fwaa-mwa.
    3SG fly cross.threshold up.away in hole-house 'It flies into the house.'

- d. Tariana (Arawakan; Aikhenvald 2006: 5) *nhuta nu-thaketa-ka di-ka-pidana* 1sG.take 1sG-cross.CAUS-SUBORD 3sG-see-REM.PST 'He saw that I took it across.'
- e. Bislama (English-lexified creole; Crowley 2002: 223) Kali i katem splitem wud.
  Kali 3SG cut split wood 'Kali cut the log in two.'

Briefly, I define a serial verb construction as a monoclausal construction consisting of multiple independent verbs with no element linking them and with no predicateargument relation between the verbs. The great majority of phenomena discussed in the literature under the heading of serial verb construction (SVC) is subsumed by this definition, though some cases fall outside the definition. The proposed generalizations (§4) are not backed up by a systematic database of a representative sample of languages here, but are simply based on my reading of a substantial part of the relevant literature. They are advanced here as a way of stimulating further work by descriptive linguists, not as a finished result of comparative research. More serious large-scale cross-linguistic work presupposes conceptual clarity, and this has often be lacking in the literature, as we will see.

Like other grammatical terms, the term serial verb construction was coined for a single language (Stewart 1963, dealing with the Kwa language Akan) and was gradually extended to cover other, similar phenomena - first in geographically close languages like Yoruba (Stahlke 1970) and in historically related languages like the creoles of the Atlantic region (Jansen et al. 1978; Sebba 1987), but then also to typologically similar languages in Southeast and East Asia (Li & Thompson 1973; Bisang 1992), to Papuan and Austronesian languages (Foley & Olson 1985; Crowley 1987; 2002), and finally to languages of the Americas (Aikhenvald & Dixon (eds.) 2006) and Australia (Meakins 2010; Nordlinger 2014). With each extension of the term to a new language, there is a danger that the meaning of the term may change, because the defining properties that were applicable in the original languages have no relevance in the new language. The resulting situation is summed up by van Staden & Reesink (2008: 21): "Despite the by now impressive literature on serial verb constructions, there is still surprisingly little agreement on what exactly defines serial verb constructions". Foley (2010: 107) goes even further: "Are there any universal defining properties of serial verb constructions? Probably not, although the term may still prove useful as a convenient descriptive label like reduplication".

My view is more optimistic: I regard the lack of agreement concerning the definition of serial verb constructions as a perfectly natural situation, not surprising at all but virtually necessary given the way that linguistic research has developed. The lack of agreement would be surprising only if the serial verb construction were an innate category of universal grammar that can manifest itself in any language, and should manifest itself in (more or less) the same way in each language. If serial verbs were a natural kind like the red fox (*Vulpes vulpes*), a species with a wide distribution over the

Northern Hemisphere, we should easily recognize them in Oceania or Mesoamerica after having first described them in West Africa, just as we can easily recognize a red fox in California or China after having first described the species in Europe (or vice versa).

But grammatical phenomena are not natural kinds. Our innate cognitive code for grammar ("universal grammar") puts few restrictions on the kinds of systems we can acquire, and diachronic adaptation allows many different patterns to survive. Each language has its own grammatical categories and constructions (Croft 2001; Cristofaro 2009), and their definitions are typically not applicable to languages which are different in relevant respects.

Thus, what we need is not a definition of a cross-linguistic category of serial verb construction (such a cross-linguistic category does not exist), but a comparative concept of serial verb construction (Haspelmath 2010). Comparative concepts are not DISCOVERED in the way natural phenomena are discovered, but are DEFINED by comparative linguists in order to allow comparison of languages. Thus, instead of lamenting the lack of agreement, linguists should feel free to simply advance a definition and then work with it. If the resulting work turns out to be interesting and productive, then the definition has proved useful. On this view, Foley's question ("Are there any universal defining properties?") makes no sense, because defining properties of a comparative concept are by their nature universal (or to be more precise, universally applicable). The only relevant question is whether a comparative concept leads to interesting comparisons and generalizations. It is in this spirit that I will define *serial verb construction* in §2, and list ten generalizations in §4.

# 1.2. The major argument-role types of serial verb constructions

Before moving on to the definition of serial verb constructions, I will cite a few more additional examples of SVCs from a range of diverse languages. The examples are arranged by argument-role types. I begin with agent-sharing constructions and then move on to patient-sharing constructions.

Agent-sharing: directional SVCs. Here one of the verbs is a directional motion verb. The other verb may be transitive (2a) or intransitive (2b).

- (2) a. Edo (Benue-Congo; Hagemeijer & Ogie 2012: 47) *Òzó sàán rrá ógbà*.
  Ozo jump cross fence
  'Ozo jumped across the fence.'
  - b. Hoan (Tuu, Botswana; Collins 2002: 4)
    Ma ||oe na ka ||boam-||boam tca.
    1SG still AUX SUB jog come 'while I was still coming jogging'

The directional motion verb can also be a three-participant verb so that the patient is shared in addition:

(3) Saramaccan (English-lexified; Muysken & Veenstra 2006: 245)
A kándi dí wáta túe a dí fája.
3SG tilt DET water throw LOC DET fire
'He poured the water onto the fire.'

In some languages, it is also possible for the directional verb to have an agent that includes the agent and patient of the other verb:

(4) Paamese (Oceanic; Crowley 1987: 48) ma-kuri-ko lo-va-haa
1SG-IMMED.take-2SG 1DU.INCL-IMMED-go
'I will take you away with me.' (Lit. 'I take you we go')

Agent-sharing: two different patients. This type is not very common, but two examples are given in (4a-b).

- (5) a. Alamblak (Sepik, Papua New Guinea; Bruce 1988: 29)
   *miyt* ritm mub-hambray-an-m
   tree insect climb-search.for-1SG-3PL
   'I climbed the tree searching for insects.'
  - b. Ewe (Kwa; Ameka 2006: 131) *ku tsi klɔ' ŋkú.me* 2SG.scoop water wash face 'Fetch water and wash your face.'

Agent-sharing: monotransitive and ditransitive verb. The ditransitive verb is normally the second verb, and the patient of the first verb is shared with the theme of the ditransitive verb.

(6) Keo (Central Malayo-Polynesian; Baird 2008: 60) Ja'o kéma dapu ti'i 'ine.
1SG build kitchen give mum 'I built a kitchen for mum.'

Agent-sharing: patient and instrument are shared in addition.

- (7) a. White Hmong (Jarkey 1991: 63, cited by Durie 1997: 341) nws xuab riam txiav nqiaj qaib 3SG grasp knife cut meat chicken 'She cut some chicken meat with a knife.'
  - b. Guadeloupean Creole (French-lexified; Ludwig 1996: 248) *I pran transpò désann anvil.*3SG take bus go.down to.town
    'He went to town by bus.'

**Patient-sharing**: The agent is shared in addition:

- (8) a. Sranan (English-lexified; Sebba 1987: 43)
  Den fon owrukuku kiri.
  they beat owl kill
  'They beat the owl to death.'
  - b. Wambaya (Mirndi, Australia; Nordlinger 2014: 277) *Barlaj-ardi ngu-ny-u daguma*. be.unconscious-CAUS 1SG.A-2SG.P-FUT hit 'I am going to kill you (by hitting).'

Patient-sharing: The patient of the first, transitive verb is also the patient of the second, intransitive verb.

- (9) a. Taba (South Halmahera-West New Guinea; Bowden 2008: 82)
  n=babas welik n=mot do
  3sG=bite pig 3sG=die real
  'It bit the pig dead.'
  - b. Lao (Enfield 2008: 134) man<sup>2</sup> paat<sup>5</sup> khòò<sup>2</sup> taaj<sup>3</sup>
    3SG slice neck die 'He killed (it) by slicing (its) neck.' (Lit. 'He sliced (its) neck (and it) died.')

The patient may also be shared when there are two intransitive patientive verbs:

(10) Eastern Kayah Li (Tibeto-Burman; Solnit 2006: 149) *?a* dīpɔ tā klɔ̄ títí
3 rice.pot fall spill constantly
'His pot kept falling over and spilling.'

This does not exhaust the kinds of attested argument-sharing types, but these seem to be the most frequent types found across languages. We now turn to the definition of the serial verb construction.

# 2. A definition of serial verb construction

The definition in (11) tries to "capture as precisely as possible, in terms that allow for empirical checking, just those phenomena that caught the attention of our descriptive colleagues and made them see a separate category" (to use Seuren's (1991: 193) apt words). It consists of five key components, listed in (12), which will be discussed further in the subsections of this section.

(11) Serial verb construction: a definition

A serial verb construction is a monoclausal construction consisting of multiple independent verbs with no element linking them and with no predicate-argument relation between the verbs.

- (12) key components of the definition
  - a. construction
  - b. monoclausal
  - c. independent verbs
  - d. no linking element
  - e. no predicate-argument relation between the verbs

Note that this definition is considerably narrower than definitions used by most other authors, and I know of no other definition that is narrower than this. This means that a number of phenomena that have been called SVCs are excluded by the definition, but it also means that the definition is practical and the generalizations that are based on it are testable.

#### 2.1. Construction

To fall under my definition, a serial verb construction must be a productive schematic CONSTRUCTION such that the meaning of a concrete construct can be determined on the basis of the meanings of its parts and the construction meaning. This means that non-compositional combinations of verbs do not fall under the definition. Such non-compositional (idiomatic) verb combinations have often been mentioned in the SVC literature, e.g. (13a-c).<sup>1</sup>

- (13) a. Yimas (Papua New Guinea; Foley & Olson 1985: 21) namarawt tikir-gat ya-na-pay-put man chair-PL 3PL.OBJ-3SG.SBJ-lie-go-PRF 'The man carried the chairs away.' (Lit. 'The man went, the chairs lay flat.')
  - b. Cantonese (Matthews 2006: 79)  $ze^{3}$  dou<sup>1</sup> saat<sup>3</sup> jan<sup>4</sup> borrow knife kill person 'do someone in' (lit. 'borrow a knife and kill someone')
  - c. Taba (Bowden 2008: 86) N=han ait te-su.
    3SG=go ascend NEG-POTENTIAL 'She hasn't gone to work in the gardens yet.' (Lit. 'She hasn't yet gone up.')

<sup>&</sup>lt;sup>1</sup> Some authors also note "synonymic SVCs", where two verbs are combined that have the same meaning (Durie 1997: 337; Aikhenvald 2006: 30). Since the resulting meaning does not arise via composition, these do not count as SVCs here either.

These cases probably bear close resemblances to regular patterns in the languages, and they would be described as closely related to the respective language-particular constructions (just as *kick the bucket* is described as closely related to English transitive construction), but they are not pure instances of a regular schematic construction and thus cannot play a role for cross-linguistic comparison. Quite generally, typology does not take into account idiomatic expressions, and confines itself to the regular patterns of languages.

Serial verb constructions have sometimes been regarded as particularly prone to lexicalization and non-compositionality (e.g. Durie 1997: §3.2, Aikhenvald 2006: §2.5,  $\S3.4.1$ ). If this were so, then cross-linguistic comparison of these structures would be more difficult than the comparison of other kinds of structures. But it is my impression that most well-known cases of SVCs are to a large extent regular and thus are susceptible to typological comparison. On the other hand, it is probably also true that the precise boundaries of serial verb constructions are still very little known. When an author tells us, for example, that their language allows three types of serial verb constructions (intransitive-intransitive, intransitive-transitive and transitivetransitive, cf. Lichtenberk 2006: 258), this rarely means that every intransitive verb and every transitive verb can occur in these constructions and that all combinations are possible. The precise semantic-pragmatic conditions for combining different kinds of verbs have been much less described than the morphosyntactic properties of the resulting constructions. Many studies of SVCs cite a few examples and acknowledge the lack of full generality, but say little about the ways in which the pattern in restricted. For example, Nishiyama (1998: 175, 196) discusses the Japanese serial verb pattern illustrated in (14a) and admits that the analogous (14b) is not possible, without saying why.

- (14) a. John-ga niwatori-o naguri-korosi-ta. John-NOM chicken beat-kill-PST 'John beat a chicken and killed it.'
  - b. *\*John-ga sushi-o tukuri-tabe-ta.* John-NOM sushi-ACC make-eat-PST ('John made sushi and ate it.')

Similarly, Sebba (1987: 60) admits that he cannot explain the contrast in (15a-b) from Sranan (but see Durie (1997) for some thoughts).

- (15) a. A teki a fisi seri.
  she take the fish sell
  'She sold the fish.' (Lit. 'She took the fish sold (it).')
  - b. \**A teki a fisi bay.* she take the fish buy. ('She bought the fish.')

Thus, there is still a lot that needs to be said about the precise boundaries of SVCs in individual languages. However, I am assuming that all languages with serial verb constructions have at least some productive and semantically regular patterns, and that the examples cited here instantiate such patterns (i.e. constructions in the standard sense).<sup>2</sup>

# 2.2. Monoclausal

While the need for compositionality is not generally acknowledged by other studies, most works on serial verb constructions state clearly that SVCs belong to a SINGLE CLAUSE (cf. 12b). The only prominent exception is Li & Thompson (1973; 1981), where some multiclausal patterns in Mandarin Chinese are regarded as serial verb constructions (see Paul 2008 for discussion),<sup>3</sup> but this usage has not been influential outside Chinese linguistics.

But what is a single clause? Syntacticians often distinguish between monoclausal and biclausal constructions, and there is a voluminous literature on clause fusion, i.e. synchronic or diachronic derivation of a monoclausal pattern from a biclausal pattern (restructuring, clause union, coherent infinitives, etc.). However, the criteria for determining clausehood are generally language-specific. Some linguists regard this as unproblematic, for example Butt (2010: 57):

"Whether a given structure is monoclausal or not can only be determined on the basis of language-dependent tests. That is to say, tests for monoclausality may vary across languages, depending on the internal structure and organisation of the language in question."<sup>4</sup>

Similarly, van Staden & Reesink (2008: 23) say about a type of SVCs in languages of eastern Indonesia:

"the construction has one or more, possibly language specific, properties that show that this construction is distinct from asyndetic coordination. For one language, this may be the scope of negation or placement of negation particles, for another it may be a radical change in meaning when a conjunction is inserted, or a characteristic prosodic contour."

From the current perspective, this is fatal: Comparative concepts must be defined in such a way that the definition is equally applicable to all languages. Applying different diagnostics to pick out the same phenomenon in different languages would make sense only on the view that a notion such as "clause" is an innate category of universal grammar. (If the grammatical categories of languages are natural phenomena like the red fox, then they need not be defined, but can be picked out by diagnostic tests, cf. Haspelmath 2015).

 $<sup>^{2}</sup>$  A limiting case is English, which can combine the verbs go and come in imperatives and a restricted range of other environments (e.g. Go get the milk; Come eat with me; cf. Pullum 1990). Since the second slot is an open class, this is a productive construction and counts as a SVC by my definition.

<sup>&</sup>lt;sup>3</sup> Another exception is Byrne (1987), who regards Saramaccan SVCs as multiclausal.

<sup>&</sup>lt;sup>4</sup> For example, a test in Spanish is clitic climbing, a test in French is reflexivization, a test in Urdu is object agreement, a test in Korean involves negative pronouns, and so on.

How can we define a clause as a universally applicable comparative concept? My proposal here is to follow Bohnemeyer et al. (2007: 501), who "rely on the criterion of lack of independent negation as a crosslinguistically applicable test for clausehood". This means that in a serial verb construction, there is only one way to form the negation, usually with scope over all the verbs. That serial verb constructions can be negated only in one way is routinely mentioned in the literature, but few linguists connect this with clausehood. An exception is Comrie (1995), who describes serial verbs in Haruai as monoclausal and then observes: "Haruai has one clear test for clause status: a clause may be negated, while elements smaller than a clause may not" (Comrie 1995: 31). Thus, while the SVC in (16a) can be negated only in one way, with a negative marker on the second verb, and negation of the first verb is impossible (see 16b), a construction of this type is possible with the alternative biclausal switch-reference construction in (16c).

- (16) Haruai (Piawi, Papua New Guinea; Comrie 1995: 31-32)
  - a. An dw röbö p-öy-n-ŋ.
    we go water get-NEG-FUT-1PL
    'We will not go for water.' (Lit. 'We will not go and get water.')
  - b. \**An dw-öl röbö p-n-ŋ-a*.
    we go-NEG water get-FUT-1PL-DECL ('We will not go but will get water.')
  - c. An dw-öl-ön, röbö p-n-ŋ-a.
    we go-NEG-SS water get-FUT-1PL-DECL
    'We will not go but will get water.'

Strict application of the criterion of single negatability leads to cases where I classify a construction differently from what other authors have said. For example, Larson (2010) regards the Empty Subject Construction (ESC) of Baule, illustrated in (17), as a two-clause coordinate construction, rather than as a serial verb construction (even though she acknowledges the many similarities between it and serial verb constructions, 2010: §9.5).

(17) Baule (Kwa; Larson 2010: 195)

Э	yi–li	gbogbo-'n	i	ase	fa-li	bakan-'n.
3sg.subj	move-CPLV	basket-DEF	3sg.obj	ground	take-CPLV	child-def
'She drop	ped the baske	t to the grou	ind and p	icked up	the child.'	

Larson's biclausal coordination analysis is based on a mixture of language-specific criteria and general considerations, and it is not explicitly directed against a serial verb analysis (no definition of SVC is provided by Larson). Larson notes explicitly that the two verbs of the ESC cannot be negated separately (cf. 18a-c), so by the definition in (11), this construction is monoclausal and hence it is a serial verb construction.

(18) Baule (Larson 2010: 205-206)

a. <i>Э</i>	fa	man	agba	man	man	Yao.
3sg.subj	take	NEG	cassava	a give	NEG	Yao
'He doesr	n't give an	y cassava	a to Yao.			

- b. \**O* kεε man ngatε di. 3SG.SUBJ grill NEG peanuts eat ('She doesn't roast peanuts and eats them.')
- c. \* *O* kεεn ngatε di man.
   3SG.SUBJ grill peanuts eat NEG ('She roasts peanuts and doesn't eat them.')

Conversely, Foley gives an example of a "serial verb construction" in Watam where negation can be in different places:<sup>5</sup>

(19) Watam (Lower Sepik-Ramu; Foley 2010: 102)

a.	namot	i	yor	i	aŋgi-r	pika-r	ba-irik-tap		
	man	a	egg	a	get-R	throw-R	NEG-go.down-NEG		
	'A man didn't get an egg and throw it down.'								

b. *namot i yor i aŋgi-r ba-pika-r ba-irik-tap* man a egg a get-R NEG-throw-R NEG-go.down-NEG 'A man got an egg but didn't throw it down.'

This is thus not a SVC by the criterion of single negatability (a similar case is the Barai construction discussed by Foley & Olson 1985: 40).<sup>6</sup>

Another argument for monoclausal status that has been cited is extractability of an argument. Jansen et al. (1978) note that in Sranan (an English-lexified creole language), both the objects can be question-fronted:

(20) Sranan (English-lexified creole; Jansen et al. 1978: 147)									
a.	San1	Kofi	teki	a	nefi	koti	_1 ?		
	what	Kofi	take	the	knife	cut			
'What did Kofi cut with the knife?'									
b.	San1	Kofi	teki	_1	koti	а	brede?		
	what	Kofi	take		cut	the	bread		
	'What d	id Kofi cut	the brea	ad with	?'				

<sup>&</sup>lt;sup>5</sup> Weiss (2012) argues that Russian asyndetic verb combinations like *begi išči* 'run (and) look for (it)' are SVCs, but he notes that either the first verb can be negated separately (e.g. *ne polenis' pročitaj* 'don't be lazy, read it through'), or the second verb (e.g. *eš' ne bespokojsja* 'eat, don't worry') (Weiss 2012: 617), so this means that the construction is biclausal by the present definition.

<sup>&</sup>lt;sup>6</sup> Note that single negatability does not mean that the negation can have only a single scope interpretation. Multiple scope interpretations are often possible (e.g. *The children are not playing in the garden* can mean 'are not playing' or 'not in the garden'), and this may be the case also in SVCs (Foley & Olson 1985: 27-28; Bruce 1988: 27-28; Aikhenvald 2006: 8-9).

This contrasts with similar-looking (covert) coordination constructions, where the Coordinate Structure Constraint rules out the question-fronting of either of the objects (see also Aboh 2009: §2.1.2 and Bisang 2009: 796 on focus-fronting/clefting). These are interesting facts, but extraction is not suitable as a defining criterion for monoclausal structures because neither question-word fronting nor coordination of clauses are universal phenomena (unlike negation). Many languages thus do not allow this test to be applied, so that it cannot be a necessary criterion for monoclausal structure.<sup>7</sup>

Since clause status is not widely associated by linguists with single negatability, it would perhaps be more transparent if "monoclausal" in the definition in (2) were replaced by "singly negatable". However, the term "monoclausal" is less cumbersome, and it would be good if more linguists became aware that it actually has little meaning in a cross-linguistic context unless we apply the same definition in all languages. The only relevant criterion that can be applied cross-linguistically seems to be single negatability, as proposed by Bohnemeyer et al. (2007).

# 2.3. Independent verbs

Of course, a serial verb construction must consist of multiple verbs (two or more), but what exactly counts as a VERB? As in the case of the comparative concept "clause", which is based on the universally found concept of negation, we need a definition of "verb" that is universally applicable. We cannot simply assume that all languages have verbs in the same sense of this word, even though the verb-noun distinction is generally quite salient across languages (cf. Dixon 2010: Chapter 11). There are many languages where property words are expressed in much the same way as action words (e.g. Northern Iroquoian, Chafe 2012), so that there are good reasons for saying that there is a flexible word class (cf. Rijkhoff & van Lier 2013) comprising both action words and property words. Some authors who are describing languages with such flexible classes include property words in their discussion of serial verb constructions, so that we find examples such as (21).

(21) To'aba'ita (Oceanic; Lichtenberk 2006: 259)
Sofu e makwa leqa.
Soap 3SG.NONFUT smell be.nice
'The soap smells nice.'

Now Lichtenberk must have good reasons for saying that *leqa* '(be) nice' is a Verb in To'aba'ita, but probably the criteria are primarily language-specific.

Now what might be cross-linguistically applicable criteria for identifying a verb as a comparative concept? As recently discussed in Haspelmath (2012), the only workable criterion for noun, verb and adjective as comparative concepts is the use of an item in a particular information-packaging function without special coding such as a copula (cf.

<sup>&</sup>lt;sup>7</sup> It is also doubtful that it could be a sufficient criterion, because question fronting is often possible from complement clauses, and it might be that clause-like constituents of the sort found with SVCs are treated like complements in some languages.

Croft 2001). Thus, verbs are defined as dynamic event expressions that do not have special coding when used in predication function. But this excludes To'aba'ita *leqa* '(be) nice', and hence (21) cannot be regarded as a serial verb construction from a cross-linguistic point of view. The verbs of a serial verb construction must express dynamic events.

But a more serious issue is the distinction between verbs and functional items such as auxiliaries and adpositions. Many authors writing on serial verbs include constructions where one of the verbs has a grammatical meaning and thus looks more like an auxiliary or an adposition. Some examples are given in (22).

- (22) a. Khwe (Khoe-Kwadi; Kilian-Hatz 2006: 116) xàmá thám` à ∥gàrá-ná tε´-ε`-tè
  3SG.M letter OBJ write-II stay-I-PRES 'He is writing a letter.'
  - b. Cantonese (Francis & Matthews 2004: 753)
    Ngo tung-gwo keoidei kinggai.
    I accompany/with-ASP them chat 'Tve chatted with them.'
  - c. Yoruba (Stahlke 1970: 61) *Mo bá o mú ìwé wá.* I benefit/for you take book come 'I bought a book for you.'

Are the items glossed as 'stay', 'with/accompany', 'benefit/for' verbs, so that the examples in (22a-c) are SVCs from a cross-linguistic perspective? If so, what about English auxiliaries such as *will*? Is *will go* a SVC?

It seems to me that the best strategy here is to make the additional requirement that the verbs in a SVC must be INDEPENDENT VERBS (cf. 12c) i.e. they must be able to occur on their own without another verb (see also Sebba 1987: 39).<sup>8</sup>

(23) comparative concept 'independent verb':

for comparative purposes, an independent verb is a form that can express a dynamic event without any special coding in predication function and that can occur in a non-elliptical utterance without another verb

This criterion would thus exclude aspectual "auxiliary verbs" such as  $t\varepsilon'$  in Khwe, just as it would exclude the temporal auxiliary *will* in English. Thus, *will go* is not a serial verb construction in English, which is a desired result. The independent-verb criterion is thus a necessary part of the definition, even though this is rarely mentioned in the

<sup>&</sup>lt;sup>8</sup> Shibatani (2009: 259) discusses Bisang's (1995: 139) requirement that each verb of a serial construction "would also be able to form a sentence on its own", and takes it to be intended to exclude verbs in a special form such as converbs (cf. §2.4 below). But it seems to me that Bisang probably meant that they should be able to occur without another verb (i.e. in a non-serial construction), as in my definition.

previous literature.<sup>9</sup> Otherwise a large number of auxiliary constructions would end up as serial verb constructions (Aikhenvald 2006:§3.4.1 seems to be happy with including them, but she is generally little concerned with a restrictive notion of SVC).

The independent-verb criterion also excludes some "role-marking" verbs such as those in (22b) and (22c), because these cannot occur on their own:

- (24) a. Cantonese (Francis & Matthews 2004: 761)
  \*Ngo jigaa tung go di jan.
  I now accompany those CLF people
  'I am accompanying those people now / I am with those people now.'
  - b. Yoruba
    \*Mo bá o.
    I benefit you
    'I benefitted you / I did something for you.'

From a language-specific point of view, it may of course still be useful to include these cases, e.g. because they may take aspect marking (cf. *tung-gwo* in (22b)).

# 2.4. No linking element

When coming from a European language, the absence of a coordinator or subordinator (more generally a linking element) in serial verb constructions is perhaps the most striking property of serial verb constructions, although there are of course unlinked coordinate and subordinate constructions in English and related languages. The ABSENCE OF A LINKING ELEMENT (cf. 12d) is perhaps the most widely cited criterion, and thus I include it here in the definition, even though it has occasionally been relaxed. Thus, Foley allows the linking morpheme -mpi- (SEQ) in a Yimas construction that he calls a SVC.

(25) Yimas (Lower Sepik-Ramu; Foley 2010: 80)

Arm-nkayi-ka-ak-mpi-wul.water-OBLcanoe(G8.SG)G8.SG.OBJ-1SG.AG-push-SEQ-put.in'I pushed the canoe down into the water.'

Aikhenvald (2006: 20, 2011: 21) explicitly recognizes the possibility of SVCs with a special "dummy" marker (which is even glossed as "SVC" in an example in Aikhenvald 2011: 21), which she says is an "empty morpheme" that is not a coordinator or marker of any kind of dependency. The problem with this approach is that there is no clear definition of "dependency marker", and "subordinator" and "coordinator" are rather difficult to define, too. Thus, it is safest to regard any element that occurs in a multiverb construction, does not occur outside of a multi-verb construction, and does not have some clear other meaning (such as tense, aspect, negation) as a linking element.

<sup>&</sup>lt;sup>9</sup> Jansen et al. (1978: 125) are careful to exclude auxiliaries, but *auxiliary* is much harder to define as a comparative concept than *independent verb* (= a verb that can occur without another verb). Thus, I use the latter instead of "non-auxiliary verb".

This means that (25) from Yimas is excluded from my definition of SVC. Another construction that cannot be a serial verb construction is the Finnish Colorative construction, involving a finite ideophonic manner verb combined with an infinitival main verb, which is considered a kind of SVC by Armoskaite & Koskinen (2014) (e.g. *kaatu-a tupsabd-i-n* [fall-INF thud-PST-1SG] 'I tumbled', lit. 'I thudded to fall'). The infinitival suffix is clearly a linking element here.

However, I should note here that constructions which include a linking element are often very similar to serial verb constructions, and it has rightly been observed that these types of constructions should be treated together. For example, Shibatani (2009) notes the many similarities between serial verb constructions of the Kwa type and Japanese converbal constructions as in (26) (see also Bisang 1995; Jayaseelan 2004).

(26) Japanese (Shibatanai 2009: 258)

*Taroo=wa tegami=o kai-te it-ta.* Taro=TOP letter=ACC write-CVB go-PST 'Taro wrote a letter and went away. / Taro went away having written a letter.'

Shibatani argues on grounds of extraction possibilities and phonological wordhood that this pattern is monoclausal, and if it were also monoclausal by the negation criterion, it would be just like a SVC except for the presence of the converbal linker *-te*. It may well be that it would be useful to have a new comparative concept (maybe "verb seriation", or "seriational construction") that comprises constructions fulfilling criteria (12a-c) and (12e). And furthermore, it may be that several or even most of the generalizations of §4 are true of this larger class of phenomena. However, I would not want to extend the term SVC in this way, simply because it is so well-established in more or less the sense of (11).

# 2.5. No predicate-argument relation between the verbs

The final criterion is that the construction should NOT INVOLVE A PREDICATE-ARGUMENT RELATION, i.e. it should not be the case that one of the verbs is (part of) an argument of the other verb (cf. 12e). This thus excludes causative constructions (cf. Durie 1997: §4.2) and other kinds of complement clause constructions, like those in (27).

- (27) a. Samoan (Mosel 2004: 272) *'ou te lee iloa 'a'au*I TAM not know swim
  'I don't know how to swim.'
  - b. Eastern Kayah Li (Tibeto-Burman; Solnit 2006: 153)  $v\bar{\varepsilon}$  kha ?ír $\varepsilon$  du  $\Lambda$ 1SG promise work own.accord NEW.SITUATION 'I promise to work myself.'

c. Lao (Enfield 2008: 161)  $man^2 h \hat{e}t^1 k \hat{e} \hat{w}^4 t \hat{e} \hat{k}^5$ 3SG make glass break 'He broke the glass.'

If one allowed complement clause constructions, one might also have to say that English sentences like (28a-b) are serial verb constructions (if one regards them as monoclausal).

(28) English

- a. She helped me solve the problem.
- b. *He made her cry*.

Complement-clause constructions are often included in the literature on SVCs (Aikhenvald 2006:§3.2.4 even recognizes complement-clause serialization as a special subtype), but it is better to exclude them, because they do not belong to the original core of SVC phenomena. There are probably a large number of languages that would have only complement clause serialization if such cases were included in the definition. An explicit exclusion of "infinitive complements" is found as early as in Jansen et al. (1978), but this criterion is otherwise mentioned rarely.

# 3. Non-criteria for the serial verb construction

After discussing my cross-linguistic definition of the SVC as a comparative concept, let me now briefly discuss some criteria that should not be part of the definition. There are two types of these: those that cannot be applied readily, and those that are not necessary as defining criteria because they can be predicted on the basis of the definitional criteria in (11).

# 3.1. Impractical criteria: Single event and single predicate

Serial verb constructions are very often said to express a single event, and not uncommonly this is included in their definition (e.g. Comrie 1995: 25-26, Bril 2004: 2, Aikhenvald 2006: 1, van Staden & Reesink 2008: 22, Bisang 2009: 796).

However, this criterion is not necessary, because there are no serial verb constructions in the sense of (11) that can be said not to express a single event. As far as I can tell, whenever a clear contrast between a single event and multiple events has been noted, it makes the same distinction as the grammatical criteria, in particular monoclausality and biclausality.

But more importantly, this criterion is not practical to apply, because there is no objective way of identifying a single event and distinguishing it from a set of several events. Everyone recognizes that the events expressed by SVCs may be complex events, just as events expressed by monomorphemic verbs often have an internally complex event structure (e.g. *kill* has the event structure 'cause to become dead'). It is sometimes said that SVCs express "what speakers consider to be culturally cohesive patterns of action" (Diller 2006: 162), but such claims have not been made precise enough to be useful for cross-linguistic comparison. The single event criterion does not really exclude anything, because humans are able to conceive of multiple events as parts of a single complex event without any limits. As Bohnemeyer et al. (2007: 499) note: "All of the events in *War and peace* may be conceived of as parts of a single event".

That SVCs "act together as a single predicate" (Aikhenvald 2006: 1, Bisang 2009: 795) or "like a single verb" (Durie 1997: 290) is said less often, but it is equally unclear what it means. First, one would have to know what exactly a "predicate" is, and second, what is meant by "act as" or "act like". This probably refers to the fact that the verbs in a SVC share negation as well as tense, aspect, and usually also one or more arguments, but these are better stated separately, either as defining criteria (as with monoclausality in (12b) above), or as generalizations (as with tense and mood in §4 below).

#### 3.2. Unnecessary criteria

Many authors mention the sharing of tense, aspect, mood and arguments, as well as a single intonation contour (without breaks) as defining criteria of serial verbs, but these are not necessary, because there are no constructions that would be excluded from the class of SVCs only because they lack these properties. Thus, these can be treated as falsifiable generalizations rather than as definitional criteria (see §4).

Several authors give fairly long lists of criteria, up to seven (e.g. Durie 1997: 291; Bril 2004: 2-3; Aikhenvald 2006: 1; Muysken & Veenstra 2006: 238; Bisang 2009: 794), and one wonders what the purpose of these is. Are they really meant as "definitions" that allow us to single out a particular class? Or are they meant as general characterizations of a phenomenon that has no clear definition but that is still useful to know about? The fact that sometimes we find "may" rather than "must" as part of the "definition" makes one suspect that it is the latter. Thus, Aikhenvald (2006: 1), in the definitional paragraph, says that "SVCs may also share core and other arguments". This cannot be meant as a defining criterion, so one wonders whether the other properties are meant as defining criteria.

One gets the impression in much of the existing comparative work on SVCs that it does not try to make claims about all SVCs, and thus it is not really crucial to distinguish sharply between defining criteria and generalizations about SVCs. Much of this work is primarily intended to illustrate and to elucidate some of the properties that some of the constructions called SVC have been found to exhibit.

The purpose of the current paper, by contrast, is to make falsifiable cross-linguistic claims about SVCs, so it is my task to make the definition of SVC very clear, and to distinguish it from the falsifiable claims. This is why I have spent so many pages on the discussion of the definition.

# 4. Generalizations

I will now list and discuss some generalizations about SVCs as defined in §2. These are claimed to hold of all languages with SVCs and of all SVCs in them, so they are really

intended as hypothesized universals. However, since I have not undertaken a systematic investigation of SVCs, but base my generalizations merely on my reading of a substantial part of the existing literature, I call them more modestly "generalizations". Many of them have been noted before (especially by Aikhenvald 2006), so this part of my paper does not claim originality. However, I think that it is very useful to summarize some of the general properties that appear to hold of SVCs.

Explanations of the generalizations will not be attempted in a serious way here. This is a matter for future research.

#### **Generalization 1**

In all SVCs, the verbs have the same tense value.

This generalization has often been noted from early on (e.g. Foley & Olson 1985: 23), and has often been included in the definition of SVCs. However, given the definition in (11), it can be stated as an empirical claim that is readily testable. It is closely related to Generalization 2.

# Generalization 2 In all SVCs, the verbs have the same mood value.

Mood is sometimes broadened to include modality and evidentiality as well (e.g. Aikhenvald 2006: §2.4). In addition, it is often said that the verbs must have the same aspectual value, but how universal this is is less clear. Muysken & Veenstra (2006: 239) cite an example from Saramaccan where the scope of the imperfective particle  $t\dot{a}$  may be different:

(29) Saramaccan (Muysken & Veenstra 2006: 239)

- a. A tá fáa páu túe.
  3SG IMPF chop tree throw
  'He is felling a tree.' (= He is engaged in the activity of chopping)
- b. A fáa páu tá túe.
  3SG chop tree IMPF throw
  'He is felling a tree.' (= The tree is falling)

One also occasionally reads that both verbs have the same illocutionary force (Aikhenvald 2006: 8) and truth-value (Muysken & Veenstra 2006: 236), but this would seem to follow from the fact that they occur in the same sentence (in fact, the same clause). Complex sentences consisting of several clauses generally have just one illocutionary force and truth value (though coordinate clauses can perhaps switch illocutionary force in the middle: *Today it is raining, and what was yesterday's weather?*).

#### **Generalization 3**

The verbs in a SVC do not have separate temporal or event-locational modifiers.

The temporal part of this generalization follows from the generalization that all clauses have the macro-event property ("MEP", Bohnemeyer et al. 2007), i.e. they can have only a single temporal modifier. Bohnemeyer et al. note that some macro-event expressions consist of several clauses, but they do not find clauses that consist of several MEP expressions. It seems that the same is true for event-locational modifiers (i.e. locational modifiers that specify the location of an event, not the location of an argument).

#### **Generalization** 4

All SVCs are pronounced with a single intonation contour, like single-verb clauses (Aikhenvald 2006: 7).

Many authors mention this as a salient feature of SVCs in their language, and I have not come across any work that contradicts it,<sup>10</sup> so I am assuming that this is true of all SVCs. For more on intonation in serial verb constructions, see Givón (1991).

#### **Generalization 5**

If a SVC expresses a cause-effect relationship, or a sequential event, the order of the two verbs is tense-iconic, i.e. the cause verb precedes the effect verb, and the verb that expresses the earlier event precedes the verb that expresses the later event (Durie 1997:§4, Aikhenvald 2006: 16, 21, 28-29).

This generalization is interesting and somewhat surprising because otherwise iconicity of sequence is not found within a clause, but only when several clauses are combined (see Diessel 2008). It is especially surprising for tightly knit SVCs where the two verbs are written as a single word (and sometimes called "compounds"), where one might expect other ordering principles to play a role.

In particular, since nominal compound order varies considerably and appears to correlate with the order of possessor and noun (Gaeta 2008), one might expect the order of the two verbs in a bipartite SVC to correlate with the order of subordinate clause and main clause, or with the order of object and verb. However, OV languages show the same order of the verbs, as illustrated by the Ijo example in (30).

(30) Ijo (southern Nigeria; Carstens 2002: 15)

ominí náma túo fí-mi they meat cook eat-PST 'They cooked and ate the meat.'

# **Generalization 6**

If there is just a single person, tense, mood or negation marker, it occurs in a peripheral position, i.e. preceding the first verb or following the last verb.

<sup>&</sup>lt;sup>10</sup> The only place where a construction that is called SVC is said to have multiple intonation contours is a construction in Barai (Foley & Olson 1985: 39) that also has multiple negation possibilities, so is excluded by my definition (see §2.3 above).

This is illustrated by various examples in this paper. Initial position of tense or mood is illustrated by (1a), (2b), (31). Final position of tense or modd is illustrated by (1b), (14a), (16a), and (30). (An exception is (8b) from Wambaya.) For person, see Aikhenvald (2006: 41-42).

# Generalization 7

In all SVCs, all the verbs share at least one argument.

This generalization is also among the most frequently mentioned characteristics of SVCs, at least since Foley & Olson (1985: 24). Thus, among the SVCs, we never find expressions of the type "Mother wrote letters father watched TV".

However, there is an exception to this in Mwotlap, as described by François (2004: 119), where we find SVCs with causal semantics of the following type:

(31) Mwotlap (Oceanic; François 2004: 119)

*Ne-len mi-yip hal-yak na-kat.* ART-wind PFT-blow fly-away ART-cards 'The wind blew the cards away.' (Lit. 'The wind blew the cards flew away.')

#### **Generalization 8**

All languages with SVCs have same-subject serial verb constructions, possibly along with other types (Foley & Olson 1985: 26, Aikhenvald 2006: 14).

Moreover, according to Aikhenvald (2006: 14), "SVCs with shared subjects are the major type of SVCs in any language". But note that it is not the case that SVCs always share an internal argument (transitive object or unaccusative subject), as Baker (1989) had hypothesized. Thus, we find SVCs like those in (32)-(33).

(32) Baule (Kwa; Larson 2010: 195)

Osi-lialiε-'nsskp-litro-'n3SG.SUBJpound-CPLVfood-DEFprepare-CPLVsauce-DEF'She pounded the fufu and prepared the sauce.'

(33) Gungbe (Kwa; Aboh 2009: 4)

Sésínú kùn mótò cè só àdó. Sesinou drive car my hit wall 'Sesinou drove my car into the wall.'

#### **Generalization 9**

In different-subject SVCs, the second verb is always intransitive (cf. Aikhenvald 2006: 16).

Thus, we do not find expressions like "I hit the boy (he) chased the girl", where both verbs are transitive, or "The pig escaped I caught (it)", where the first is intransitive. Aikhenvald (2006: 16) mentions the following case in Kayah Li as a counterexample:

(34) Eastern Kayah Li (Solnit 2006: 151)

?a $n\bar{3}$  $p\bar{a}$ phúce $m\varepsilon'klu\bar{a}$ 3commandcutchildpipe'She told the children to cut rhythm-pipes.'

However, since I excluded cases where one verb is the argument of the other verb (§2.5), this is not a counterexample in the current context.

#### **Generalization 10**

A SVC cannot have two different agents, i.e. when a non-agent is shared, then the agent must be shared as well.

Thus, we do not find expressions like "He hit she killed pig", or "He arrived village she greeted (him)".

All of these generalizations are readily falsifiable, and I have found isolated exceptions only for Generalizations 6 and 7.

# 5. Comparison vs. description of serial verb constructions

The most important different between my approach in this paper and much of the earlier comparative literature on SVCs (such as Foley & Olson 1985, Baker 1989, Durie 1997, Aikhenvald 2006, Bisang 2009) is that I limit myself to the goal of comparing languages and trying to find generalizations that apply to all languages.

Typically other authors have simultaneouly pursued the goal of describing (or "analyzing") individual languages. This is clearest in the case of generative work (e.g. Baker 1989; Déchaine 1993; Collins 1997), because it is a hallmark of the principlesand-parameters approach that the proposed properties of universal grammar are intended to account for limits on cross-linguistic variation and at the same time to allow insightful analyses of individual languages (see Baker 2001). Especially in Baker (1989), some interesting constraints on possible serial verb constructions are proposed, but in view of the substantial counterevidence from other languages (e.g. Durie 1997: §2; Aboh 2009), most linguists seem to have abandoned these proposals. Thus, most recent generative work limits itself to providing analyses of individual languages, without readily falsifiable claims about languages in general (e.g. Hiraiwa & Bodomo 2008; Aboh 2009).

Other authors such as Bril (2004), Aikhenvald (2006), van Staden & Reesink (2008) and Bisang (2009) seem to be primarily concerned with setting out some salient subdivisions within the broad class of SVCs, as well as characterizing their functions. Especially Aikhenvald (2006) does mention a number of universal generalizations (as noted in §4), but this is apparently not the main purpose of this kind of work. The main purpose seems to be to give an overview of a range of phenomena in order to help fieldworkers to understand and describe their particular languages.

In view of the fact that these authors want to describe language-specific constructions at the same time as comparing them, it is not surprising to find that some of them despair of finding a unified concept of SVC:

- (35) a. van Staden & Reesink (2008: 17)
  "we do not consider verb serialisation as a coherent theoretical concept with
  - clearly definable properties valid in all languages for which it is reported"
    b. Shibatani (2009: 278)
    "SVCs are not a unified phenomenon across languages or even within a single language"
  - c. Bisang (2009: 811-812)
    "it is still an open question to what extent what is discussed under the label of 'serial verb construction' ... is actually a cross-linguistically coherent phenomenon."
  - d. Foley (2010: 79)"SVCs are in no sense a unified phenomenon" (similarly Senft 2008: 12)

My definition in §2 above clearly presents the serial verb construction as a "unified", "coherent theoretical" concept. However, this concept is not identical to a descriptive concept in a particular language. In all or at least most languages with a SVC, there are some phenomena which are not subsumed under my definition even though a language-specific definition of the construction would subsume them. For a language-specific definition, criteria such as tense marking (e.g. Collins 1997) and focus-fronting (e.g. Aboh 2009) may be much more relevant. And many languages will have constructions called "serial verb construction" which have much narrower properties than those implied by (11) (e.g. in Edo, they must share both a subject and an internal argument, Stewart 2002: 12; in Lakota, they are phonologically compounds, De Reuse 2006: 303; etc.). Or conversely, an author may choose to call a phenomenon "SVC" that does not fall under my definition (e.g. Jayaseelan 2004 for Malayalam converb constructions).

But language-specific descriptive categories must be kept separate from universally applicable comparative concepts (Haspelmath 2010). It is not possible to find a single concept that is both universally applicable and that will describe SVCs in all individual languages. The serial verb construction is quite unlike the natural kind *Vulpes vulpes* (the red fox), which is both applicable cross-continentally and a precise characterization of a particular specimen that I might find in my garden. The comparative concept of serial verb construction that I presented in §2 is more like behavioural or ecological categories such as "predator" or "migratory animal". These are not concepts for entities that are found in nature as such, but concepts specifically created by scientists who adopt a particular comparative perspective on nature. Different scientists may want to work with different concepts, so it makes little sense to discuss whether a particular kind of borderline phenomenon should be included or not in the class of predator or serial verb construction.<sup>11</sup>

<sup>&</sup>lt;sup>11</sup> For example, Durie (1997) says that Lord (1974) "has argued that such causatives in Yorùbá are genuine cases of verb serialization". But whether X is a case of Y is simply a matter of definition, and is not something that one needs to "argue" for or against. Apparently Durie thought of SVCs as natural kinds which exist independently of the linguists's definitions.

# 6. Conclusion

We have seen in this paper that although serial verb constructions are quite diverse in the world's languages, it is possible to define the term *serial verb constructions* (or in other words, to create a comparative concept 'serial verb construction') in such a way that a substantial number of interesting and testable generalizations can be formulated about them.

The definition proposed and explained in §2 may strike some readers as arbitrary and unmotivated. But while I admit that it is (of course) arbitrary (in the sense that I could have chosen a different concept to attach to the label *serial verb construction*), it is motivated by two goals: the goal of preserving the continuity of the research tradition, and the goal of identifying universal properties of human languages.

I have made it clear that I am building on and continuing the research tradition of Stewart (1963), Stahlke (1970), Foley & Olson (1985), Sebba (1987), Lefebvre (1991), Lord (1993), Durie (1997), Crowley (2002), Aikhenvald (2006) and Bisang (2009), so I have tried to formulate the definition of SVC in such a way that it is as close as possible to the phenomena discussed in this research tradition. As far as I can see, all the constructions that are considered as SVCs in the current paper are also considered SVCs by these earlier authors.

My definition is narrower than most previous definitions, in particular in excluding non-compositional combinations, combinations with a verb that does not occur independently, combinations with property words, and combinations with a predicate-argument relation between the verbs. But this is for good reasons: First if a broader definition (such as Aikhenvald's 2006 definition) were adopted and applied consistently, then a large number of phenomena that are not part of the research tradition would fall under SVCs, thus threatening the continuity of the tradition.<sup>12</sup> Second, a broader definition, or a definition that also includes other features such as a single tense value or a single intonation contour, would not allow us to formulate the same number of testable empirical generalizations. For the same reason, I have not adopted a prototypical definition (cf. Bisang 2009: 811). While one may have the feeling that certain SVCs are more and others are less prototypical, it is generally difficult to justify such prototypes, and prototypical definitions cannot be used for formulating testable generalizations.

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<sup>&</sup>lt;sup>12</sup> As I noted in §2.4, it may well be that a broader concept encompassing both SVCs and converbal constructions, for instance, will be useful. But such a broader concept should be given a different term, in order to avoid confusion.

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