

### 23.1 Introduction

Since the work of Hugo Schuchardt (1914), who noted the resemblance between Ewe serial verbs and Surinam creole constructions, there has been fairly a continuous discussion of serial verbs in the literature on creoles. The main issue is to what extent these serial verbs can be traced back to West African or other specific substrate sources, and to what extent they are autonomous developments. Serial verb constructions occur, in the Kwa-languages of West Africa, in the Sino-Tibetan language family, in the languages of Cambodia, in the Austronesian languages of New Guinea, in Malagasy, and in the creole languages of the Atlantic and Pacific areas among others.

In 23.2 we present a general description, a preliminary definition, and an enumeration of frequently occurring types of serial verb constructions. Section 23.3 is aimed at the problem of typology and parametrization: what makes serial verb constructions possible in a language? In 23.4 we discuss the different possible structures proposed for the serial verb construction: coordination, complementation, adjunction, and in 23.5 the problem of 'shared arguments': one noun phrase sometimes appears to belong to different verbs. Section 23.6 treats some of the temporal and aspectual dimensions of the serial verb constructions: do the different verbs in serial verb constructions mark different events or a single event?

### 23.2 Overview and definition

It is time for some illustrative examples. Sentence (1) contains a frequently occurring type in which a verb of movement, *bula* 'fly', is modified by a directional verb, *bay* 'go':

- (1) E-l a bula bay. (Papiamentu)  
 3SG ASP fly go  
 'He flew away.'

In (2) a benefactive adjunct is made possible by using the verb *bay* 'give':

- (2) Li pote sa bay mo. (Guyanais)  
 3SG bring that give 1SG  
 'He brought that for me.'

Finally, sentence (3) illustrates the case of *tEk* 'take', that introduces a comitative adjunct:

- (3) Dɛm go in tɛk im go bak. (Gullah)  
 3PL go and take 3SG.ACC go back  
 'They are going back with him.'

In (1) to (3) only some of the possible functions of serial verb constructions are illustrated. Below, a somewhat more extensive overview of the functions of serial verb constructions in the creole languages is given, partly based on the overview in Jansen et al. (1978). In the study of serial verb constructions several criteria are implicitly assumed in respect of serial verb constructions. Generally they amount to something like the following. A serial verb construction contains two verbs which have:

- (4) a. only one expressed subject  
 b. at most one expressed direct object  
 c. one specification for tense/aspect  
     – often only on the first verb  
     – sometimes on both verbs, but semantically one specification  
     – sometimes only on the second verb  
 d. only one possible negator  
 e. no intervening coordinating conjunction  
 f. no intervening subordinating conjunction  
 g. no intervening pause possible

Generally one verb is fixed, the other one drawn from a certain semantic or aspectual class. In the overview in (5) only the fixed verb in the serial verb constructions is mentioned. It is always the second verb of two, except with *take*:

- (5) *Functions*
- |            |                 |                                  |
|------------|-----------------|----------------------------------|
| locational | <i>go</i>       | direction away                   |
|            | <i>come</i>     | direction towards                |
|            | <i>surround</i> | around                           |
| argument   | <i>be</i>       | locative                         |
|            | <i>give</i>     | benefactive, dative              |
|            | <i>take</i>     | instrumental, comitative, object |
|            | <i>say</i>      | finite complementizer            |



aspectual	<i>finish</i>	perfective
	<i>return</i>	iterative
	<i>be</i>	continuative
degree	<i>pass</i> (NP)	comparative, excessive
	<i>suffice</i>	enough

Four major groups of meanings are distinguished: directional, argument introducing, degree marking, and aspectual serial verbs. These four are arranged very roughly in the order of frequency in which these semantic categories are marked by serial verbs in different groups of creole languages. Then, within each semantic category, typical verbs are listed, again in rough order of frequency, which encode a specific type of meaning.

The distribution of the serial verb constructions in the creole languages is roughly as follows:

- (a) creoles with serial constructions, including *take*, are Saramaccan, Sranan, Krio, Gullah, Jamaican, Guyanais, Haitian;
- (b) creoles with serial constructions, but excluding *take* are São Tomense, Principense, Tok Pisin, Negerhollands, Papiamentu, Berbice, Seychellois;
- (c) creoles with no serial verbs: Philippine Creole Spanish, Hawaiian Creole English, Senegal Crioulo, Mauritian Creole, Réunionais.

Next to the specific verbs in (5), in various languages other verbs may occur sometimes in serial verb constructions. It is a matter of debate as to what extent serial verb constructions are limited to specific lexical items.

### 23.3 Parametrization and typological correlates

If there were something like a **serializing language-type**, we would expect a number of typological correlates (co-occurring linguistic features) of serial constructions. In some theories, these typological correlates are accounted for by parameters (see chapter 11). Often the idea in the background is that serial verbs are there to express certain notions that could not otherwise be expressed. We will briefly discuss some of the possible correlates:

**Word order** is not promising. The Caribbean creole languages are all svo-languages, but some West African serializing languages are underlyingly sov (as suggested in work inspired by Koopman 1984), and some are sov on the surface as well, like Ijò. Malagasy is verb-initial, and in the Pacific and Sino-Tibetan cases we find both sov and svo-languages.

**Verbal derivational morphology** is absent. This is surely the case for verbs in the Caribbean creole languages, which are mostly monomorphemic, and seems to be true to a certain extent, for West African cases. Exceptions are reduplication and e.g. obsolete

causative formation in Berbice Dutch. Many serializing languages have null case marking and case assignment under strict adjacency.

**p** and **v** are non-distinct in serializing languages. Problems with this approach are that, first, serial verbs allow **stranding**, as verbs usually do, Ps (in Sranan and Haitian) generally do not:

- (6) a. San Edgar koti \_\_\_\_? (Sranan)  
 what Edgar cut  
 'What did Edgar cut?'  
 b. San Edgar teki \_\_\_\_ koti a brede?  
 what Edgar take cut the bread  
 'What did Edgar cut the bread with?'  
 c. \*a nefi san a e koti a brede nanga \_\_\_\_  
 the knife that 3SG ASP cut the bread with  
 'the knife that he cuts the bread with'

Second, (some) serial verbs allow **predicate cleft** (see chapter 24) just like verbs, and Ps do not (but see chapter 24 for a discussion of particles):

- (7) a. Na koti Edgar koti a brede. (Sranan)  
 FOC cut Edgar cut the bread  
 'Edgar really cut the bread.'  
 b. Na teki Edgar teki a nefi koti a brede.  
 FOC take Edgar take the knife cut the bread  
 'Really with the knife Edgar cut the bread.'  
 c. \*Na nanga Edgar koti a brede nanga a nefi.  
 FOC with Edgar cut the bread with the knife  
 'With the knife (really) Edgar cut the bread.'

Third, some creole languages (e.g. Principense) distinguish oblique (assigned by **p**) from accusative case (assigned by **v**). Fourth, all creole languages have a number of prepositions lacking verbal properties. Serial verbs are also used non-prepositionally, as shown in (5).

A further parameter or typological correlate might be that serial verbs are additional **case markers**, because the other verbs only assign case on a limited basis. Problems with this approach are that all creole languages have double object-constructions, and that there are a great many intransitive verbs that are used serially. Compare for the first point (8) and (9) from Principense (Günther 1973):



- (8) Pwe sa da minu dyo / da dyo da minu. (Principense)  
 father ASP give child money /... give money give child  
 'Father gives the child money. / ... gives money for the child.'
- (9) N ka futa mwi m dyo /... futa dyo da mwi m.  
 ISG ASP steal mother my money /... steal money give mother my  
 'I stole money from my mother. /... stole money for my mother.'

Here it is clear that in each case there is also a double object construction, with a specific meaning.

Serial verbs are additional **markers of thematic roles**. Problems with this approach are first that it presupposes that languages are serializing because in one way or the other verbs cannot assign more than one internal and one external theta-role. This goes against the idea that verbs tend to have the same arguments cross-linguistically, cf. the principle UTAH (Baker 1988). Second, serial verbs can have a whole range of interpretations. Finally, serial verbs can occur together with prepositions. This last property would be unexpected if the serial verb construction was there to assign a thematic role.

There are two possible typological features that can only be stated in highly theory-specific terms, and within those theories, may indeed be the defining feature of a serializing language. First, it may be that in serializing languages the verb is **separate from INFL**, the markers for tense and aspect, and VP can function as a secondary predicate, since there is no direct link to a tense anchor for a proposition. Normally a predication is the core of a proposition, as in *Mary walks*, where *walks* is predicated of *Mary*. Here *walks* is the primary predicate of the clause, and is anchored by the finiteness of the verb (in this case present tense). Suppose there were a secondary, non-finite, predicate *go*, indicating the direction in which Mary's walking takes place: we then have a serial construction. Second, it could be that in serializing languages it is possible to have **VP-complements** instead of full clausal (CP) complements. In any case this is an area for further exploration.

### 23.4 Structure and order

If serial verb constructions form chains, what are the concatenation principles, and what is the structural configuration? In the literature three possibilities are suggested: coordination, subordination, and adjunction. The arguments for an analysis in terms of coordination are that in some cases there is a temporal order between the actions expressed in the serial verb constructions. Compare the following example from Saramaccan:

- (10) Mi bi kisi wan pingo kii boi nyan. (Saramaccan)  
 ISG ANT catch a boar kill boil eat  
 'I had caught a boar, killed, boiled, and eaten it.'

While here one can doubt the serial (versus coordinated) status of the construction, we also find sequential effects with classic contrasts such as that between (11a) and (11b) (cf. Sebba 1987):

- (11) a. Mi teki fisi seri. (Sranan)  
 ISG take fish sell  
 'I sold the fish.'  
 b. \*Mi teki fisi bai  
 ISG take fish buy  
 'I bought the fish.'

Nonetheless Jansen et al. (1978) and Sebba (1987) show that serial verb constructions never show the island effects that have been associated with coordinated structures since Ross (1967; see chapter 24).

A second possibility is suggested in Schachter (1975), and adopted in Jansen et al. (1978), Sebba (1987), and in a modified form in Baker (1989), namely that serialization involves a form of subordination. Arguments for this supposition are in particular the extractability of elements from serial verb constructions, which we have already seen in (6), and the close semantic relationship between the verbs in most serial verb constructions, often comparable to that between a V and a P in a [V PP]-construction.

An argument against subordination – an otherwise highly plausible analysis – is constituted by the arrangement of the verbs in a serial verb construction. How are the verbs in the chain placed in a specific order? In the case of subordination an arrangement determined by verb-complement order, that is, by the directionality of government would be a plausible answer. The comparison of serial verb constructions in Sranan (Sebba 1987) and Ijò (Williamson 1965) suggests that the matter must be more complicated. (12) shows that Ijò governs to the left:

- (12) a. keni bila eri-mi (NP V. Ijò)  
 an elephant see-PAST  
 'saw an elephant'  
 b. bele-bi-o nama tua (NP P NP V)  
 pot-T-in meat put  
 'put meat in the pot'



- c. Ari u-di yo-koo bo-mi. (Compl v)  
 3SG see in.order.to come-PAST  
 'I came in order to see him.'

The same direction holds for [NP v] in (12a), for [[PP NP] v] in (12b), for [s v] in (12c). Note also that tense marking is completely to the right in all cases, thus [vP Infl].

In Sranan the directionality of government is rightward:

- (13) a. koti a brede (v NP. Sranan)  
 'cut the bread'
- b. poti a brede a tafra tapu (v NP PP)  
 put the bread the table top  
 'put the bread on the table'
- c. Eddy e koti a brede fu nyan en. (v Compl)  
 Eddy ASP cut the bread to eat it  
 'Eddy cuts the bread to eat it.'

Nonetheless it turns out that the order of the verbs in serial verb constructions in both languages is the same in a number of constructions. We give two examples. Consider first the *take* serial verb constructions in (14) and (15):

- (14) ... aki ... v (Ijo)  
 a. ye aki-ni u-bee  
 thing take 3SGM-say  
 'say something to him'
- b. aru-bi aki tin kaka-mo  
 canoe-T take tree tie-D  
 'tie the canoe to a tree'
- (15) teki ... v ... (Sranan)  
 a. no teki baskita tyari watra  
 no take basket carry water  
 'don't carry water with a basket'
- b. teki Dia poti na brakoto  
 take Deer put LOC barbecue  
 'put Deer on the grill'

The same holds for the *give* serial verb constructions in (16) and (17):

- (16) ... v... piri (Ijọ)
- a. *duma tun-ni a-piri*  
 song sing 3SGF-give  
 'sing a song for her'
- b. *egberi gba-ni u-piri*  
 story say 3SGM-give  
 'tell him a story'
- (17) v... gi... (Sranan)
- a. *seni wan boskopu gi tigri*  
 send a message give tiger  
 'send a message to Tiger / send Tiger a message'
- b. *prani a karu gi yu*  
 plant the corn give 2SG  
 'plant the corn for you'

The fact that the arrangement of the elements in the serial construction is independent of the directionality of government suggests that there can be no government relation, which would be typical of subordination.

The third possibility to concatenate the VPs is by way of adjunction. For this conclusion recent work by Law & Veenstra (1992) provide us with additional arguments. There are two options: either  $VP_1$  is an adjunct to  $VP_2$ , or  $VP_2$  is an adjunct to  $VP_1$ . We will give two arguments suggesting that the latter approach is more fruitful.

First, as Déchaine (1988) points out for Haitian, the object of the first verb is referentially more prominent than (in structural terms: asymmetrically c-commands) the object of the second verb:

- (18) a. *M pran manch panyen<sub>i</sub> an mete bo kote li<sub>i</sub>.* (Haitian)  
 1SG take handle basket the put LOC near 3SG  
 'I put the basket<sub>i</sub>'s handle near to it<sub>i</sub>.'
- b. \**M pran manch li<sub>i</sub> mete bo kote panyen<sub>i</sub> an.*  
 1SG take handle 3SG put LOC near basket the  
 'I put it<sub>i</sub>'s handle near to the basket<sub>i</sub>.'

Sentence (18b) is ungrammatical under the intended coreferentiality. For an NP to bind a



pronoun, it must c-command the pronoun. The explanation for the difference in grammaticality is that the NP in (18b) fails to c-command the pronoun and, hence, coreferentiality is barred. The conclusion is that there is an asymmetrical c-command relation between the two NPs. This observation is easily accommodated if the VP *mete bo kote l* is an adjunct of the VP *pran manch panyen*.

The second argument concerns adjunct extraction. If the first VP were adjoined to the second VP, we would expect that an adjunct WH-phrase could only be construed with the second VP, since adjunct extraction out of an adjoined maximal projection is not possible. The reverse is true, however. As shown in Veenstra (1993) for Saramaccan and Sranan Tongo it is only possible to construe an adjunct WH-phrase with the first VP and not with the second VP:

- (19) Ufa m faa di pau tue? (Saramaccan)  
 how ISG fell the tree throw  
 'How did I fell the tree?'

The answer to the question in (19) can only refer to the way the cutting of the tree was done, and not to the way the tree fell down.

In conclusion, a good case can be made for adjunction as the guiding principle for the stacking of VPs in serial verb constructions. See for a similar conclusion Law & Veenstra (1992).

### 23.5 Shared arguments

An observation which goes back to Stewart (1963) is that overt subjects and overt objects in serial verb constructions are semantically related to both verbs, i.e. the verbs share their arguments. Thus, in (20) the object *liv la* is an object of *pran* as well as of *montre*. Similarly, *men* is the subject of both predicates:

- (20) Men pran liv la montre Jan. (Haitian)  
 ISG take book the show John  
 'I showed the book to John.'

The question is whether the (semantic or syntactic) sharing of arguments, both subject and object, is obligatory in verb serialization. The most explicit answer to this question has been formulated in the work of Baker (1989). The sharing of arguments is seen there as one of the defining properties of the construction. Moreover, this sharing is not random, but is

thematically restricted. In constructions with more than one internal argument, as in (20), the order in which arguments appear obeys the following thematic hierarchy:

- (21) Agent < Instrument < ... < Theme < Goal < Location

We will see that neither subject- nor object-sharing is obligatory and that there is cross-linguistic variation with respect to the thematic restriction on argument sharing. We proceed in the following way: first, we discuss data in which there is no subject sharing. Part of the evidence is based on the behavior of reflexives and pronouns. Second, we present cases where there is no overt object to be shared or where the second verb (v2) does not have a covert object. Third, we turn to cases that violate the thematic restriction on object sharing.

In the examples (22) through (25) it is evident that the different verbs do not share the same subject. In (22) it is John who gives the book to Paul, who gives the book to Mary. Note that although the verbs do not share subjects, they share the object *liv la*:

- (22) Jan bay Pol liv la bay Mari. (Haitian)  
 John give Paul book the give Mary  
 'John gave the book to Paul to give to Mary'

That the different verbs do not necessarily share the same subject is also shown by the behavior of reflexives and pronouns (cf. Veenstra 1989 on Sranan):

- (23) a. Mi<sub>i</sub> kai di mujee<sub>i</sub> (ko) luku ensee<sub>i</sub>/en<sub>i/k</sub>. (Saramaccan)  
 1SG call the woman (come) look 3SG-self/3SG  
 'I called the woman (to come and) look at herself.'  
 b. Mi kai di mujee (ko) luku mi/\*miseei.  
 1SG call the woman (come) look 1SG/1SG-self  
 'I called the woman (to come and) look at me.'

The facts in (23) can be accounted for in a straightforward manner. Reflexives have to be bound in their governing category and pronouns must be free in their governing category. Therefore, there has to be a covert subject in front of v2 that is coreferent with the matrix object *di mujee* in order to account for the pattern in (23). Note that the two verbs do not share an object either.

The last set of data we discuss also comes from Saramaccan (Bickerton & Iatridou 1987). In these cases, both verbs appear to share an object and the behavior of reflexives and pronouns clearly shows that the two verbs have different subjects:



(24) Di mujee, da di pikin, di sopi wasi enseei.<sub>i/j</sub>. (Saramaccan)  
 the woman give the child the soap wash 3SG-self  
 'The woman gave the child the soap to wash himself with it.'

(25) Di mujee, da di pikin, di sopi wasi en.<sub>i/j</sub>.  
 the woman give the child the soap wash 3SG  
 'The woman gave the child the soap to wash her with it.'

In (24) it is the woman who gives the soap, but it is the boy who washes with it. Note that, as in (22), v<sub>1</sub> selects two internal arguments, of which one acts as the subject of v<sub>2</sub>, while the other can be regarded as an argument of v<sub>2</sub>. In all cases in which v<sub>1</sub> introduces two internal arguments, there is no subject sharing and, moreover, the Goal argument of v<sub>1</sub> is interpreted as the subject of v<sub>2</sub>.

As far as the obligatory sharing of objects is concerned, we have evidence that this is not necessarily the case. In the examples in (26) and (27) there is no object sharing:

(26) A de wan bunu mujee d'en. (Saramaccan)  
 3SG be a good woman give=3SG  
 'She is a good woman for him.'

(27) Mi kai di daata (ko) kii di sindeki.  
 1SG call the doctor (come) kill the snake  
 'I called for the doctor (to come and) kill the snake.'

There is no sharing either because v<sub>1</sub> does not have an object, as in (26), or because v<sub>2</sub> does not have a covert object coreferent with the object of v<sub>1</sub>, as in (27).

The last issue we discuss concerns the thematic restriction on object sharing as proposed by Baker (1989). It implies that if v<sub>2</sub> selects a Theme and an Instrument, it is only the Instrument that can be shared with v<sub>1</sub>. Similarly, if v<sub>2</sub> is a regular three-place verb (like *give*), it is the Theme that is shared with v<sub>1</sub> rather than the Goal. This restriction may cover the observed facts for some serializing languages. Nonetheless, it is too restrictive for other languages, such as Haitian, Sranan and Saramaccan (Law & Veenstra 1992; Veenstra 1993):

(28) a. Jan pran pen an koupe ak kouto a. (Haitian)  
 John take bread the cut with knife the  
 'John cut the bread with the knife.'

- b. Jan pran Mari montre liv la.  
 John take Mary show book the  
 'John showed the book to Mary.'

It appears that the cross-linguistic variation with respect to the ordering of arguments in SVCs is rather due to language-specific constraints than universal ones on the process of serialization.

In conclusion, we have seen that in verb serialization it is not obligatory for the different verbs in the construction to have the same subject or object. Although argument-sharing is not obligatory, we still find many cases in which one would like to say that arguments, both external and internal, are being 'shared' by the verbs. For different proposals to account for this phenomenon, we refer to Collins (1993), Déchaine (1993) and Law & Veenstra (1992).

### 23.6 Lexical and semantic aspects

A problem that serial verb constructions pose for grammatical theory is how their lexical and their syntactic properties interact. On the one hand, they are clearly lexically determined: the verbs in a serial chain are in part lexically restricted, they sometimes form idioms (though this appears to be the case more often in the Kwa-languages than in the Caribbean, where true serial idioms are rare: Saramaccan *v líku* 'try to *v*' may be the exception), they often appear to undergo thematic restructuring to form complex predicates. On the other hand, the individual verbs in the chain are clearly separate verbs assigning cases and thematic roles to intervening objects. Also, the different verbs may denote different sub-events.

What are the semantic relations between the verbs? How do the different verbs in the chain interact? Two possibilities come to mind:

- a. all the verbs in the chain are separate predicates and the relation between them is one of adverbial modification.
  - b. the verbs undergo thematic restructuring and become one predicate semantically;
- There are several ways in which to approach this issue. One is to set up a division between languages of type (a) with clausal serial constructions, relatively more independence between the different sub-events denoted by the separate verbs, and free lexical selection; and type (b) with phrasal serial constructions, relatively less independence, thematic restructuring, and a limited set of participating verbs.

- (29) a. clause-serializing: Saramaccan, Berbice  
 b. VP-serializing: Haitian, Papiamentu, etc.



A second possibility is to construct a scale which runs from coordination to subordination (Fugier 1987):

(30)	coordination	enumeration of two distinct events
	I	two distinct events in tight juxtaposition
	II	one event and its consequence
	III	one event and the aim towards which it tends
	IV	two concomitant events
	V	one event and its reformulation
	VI	one event and the way it is realized
	subordination	one event, and a second one on the occasion of the first one

A major drawback for the lexicalist approach is that it assumes there has to be a tight relation between the two verbs in the construction. As we have already seen in 23.4, it cannot be a relation in terms of government, given the similarity of typologically different languages (VO versus OV) with respect to the arrangement of the different elements in the construction. If, on the other hand, the relation between the verbs resembles rather adverbial modification, it is not evident how to account for the certain restrictions that hold between the two verbs.

A possible synthesis of the two approaches would be to say that although the different verbs head their own predicate, the relationship is one in terms of predication and, as such, they resemble secondary predication constructions in non-serializing languages. The main difference would be that in serializing languages verbs can head a secondary predicate (cf. Muysken 1987). It is possible to state lexical restrictions, the fact that particular verbs select only certain classes of verbs, on such structures. See Larson (1991) and Law & Veenstra (1992) for suggestions and analyses along these lines.

### Further reading

An early overview of serial verbs in the creoles is given in Jansen, Koopman & Muysken (1978). Serial verb constructions in Papiamentu are analysed in Bendix (1972). Sebba (1987) has given the most complete description of serial verb constructions in Sranan. Byrne (1988) deals with Saramaccan, and Veenstra (1990) is dedicated to Jamaican. In Wingerd (1977) and Lefebvre (1990; 1991; 1992) Haitian is studied.