
REVIEW

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Crowley, Terry. 2002. *Serial Verbs in Oceanic: A Descriptive Typology*. Oxford: Oxford University Press.

1. Introduction

Serial verb constructions (SVCs) have assumed some importance in modern linguistics because they pose difficulties in synchronic description and for the syntactic theories which attempt to account for them. They also display interesting paths of diachronic development. *Serial Verbs in Oceanic: A Descriptive Typology* by Terry Crowley is the first easily accessible survey of SVCs in a language family which has received relatively little attention with respect to this phenomenon, and as such it is a welcome addition to the literature on serial verbs. At the very least Crowley's book should result in a more realistic picture of the distribution of SVCs cross-linguistically, although it has a lot more to offer besides rectifying the typological imbalance. SVCs in Oceanic exhibit structural diversity not characteristic of SVCs in other language families. This holds even for the serial verb system within one language, as becomes apparent from the discussion of Paamese, which displays two structurally distinct schemes of serialization encompassing a wide range of semantic functions.

The Paamese case study forms the bulk of synchronic description in this book, and it is only through the depth of detail Crowley provides that the com-

plexity of Paamese serial verbs can be grasped. The SVCs of other Oceanic languages have not been detailed as extensively as those of Paamese (if they have been documented at all), but Crowley draws on as wide a range of data possible to give a faithful picture of the features characteristic of Oceanic SVCs and the degree of variation they admit. I will discuss Crowley's exposition of Paamese SVCs and his general survey of SVCs in Oceanic in Section Three below.

Crowley's synchronic description of SVCs across Oceanic is limited by the paucity of available data, but this does not stop him from making some speculations about the evolution of SVCs in this family, and in particular the possibility that serial verbs, of some variety, may have been a feature of Proto Oceanic. Other interesting speculations are concerned with the emergence of SVCs in Oceanic Pidgins. I will discuss these diachronic issues in Section Four, but first and foremost, Section Two will describe what a serial verb actually is, and how these constructions should be defined and identified.

2. The phenomenon of Serial Verbs

Serial verb phenomena were first documented and discussed in Christaller's (1875) description of the Twi language, and have received a fair amount attention in the modern linguistics literature, mainly in connection with African languages, but also for South-East Asian languages, and creoles. Yet, despite this level of attention, there is a conspicuous absence of any consensus about just what a SVC actually *is*, or, in practical terms, how to determine which clauses containing two or more verbs in sequence should be included or excluded from this category. Writers investigating serial verbs tend to complain that this term has been applied inconsistently, while at the same time acknowledging the difficulties that any attempt to define this category will face. One instantiation of this problem is the inclusion under this category of what Ansre (1966) terms 'verbids' – verb-like morphemes which nevertheless display a syntactic incapacity to function as fully-fledged verbs. Arguably, verbids should be disqualified as serial verbs on the basis of a defining requirement that the combined elements in a SVC must have full verbal status. The difficulty that this raises is that in some cases, possibly through diachronic instability, there is uncertainty as to whether a certain item has full verbal status. This requirement also calls into question the criteria for establishing an item as a verb. In many serializing languages (South-East Asian languages and

creoles in particular), there is scant evidence for establishing the grammatical category of an item, and under such circumstances it can be difficult to ascertain whether a given construction is a SVC.

A common practice when explaining what a SVC is to an English speaker is to present sentences of the form of (1), where the present tense form of *go* (or, alternatively, *come*) is directly followed by another verb in present tense:

1. I'll go get the book.

Such sentences effectively give the *flavour* of a serial verb, although Crowley ultimately argues that they are not SVCs, but instead involve covert coordination (2002: 11). SVCs are single clauses which contain multiple predicates not in relationships of either coordination or subordination. Crowley narrows the definition of SVCs further to Sebba's (1987) criteria:

2. • Both verbs must be lexical verbs in that they must both be able to function independently within a clause as verbs in their own right.
- Both constituent verbs within the serial construction – if there is any possibility of the two being conceived as expressing independent events – must be interpreted as having the same categories of tense-aspect-mood.
- There must be no marking of a clause boundary between the two verbs.
- There should be no conjunction appearing between the two verbs. (Crowley 2002: 12)

By this stage it may seem that SVCs have received a rather tight, explicit definition, yet a difficulty that remains is that, in relation to the second point, languages with SVCs often have no verbal morphology, so there will be no clear indication of whether the items in a putative SVC share the same tense-aspect-mood categories. Another tendency for languages suspected of having SVCs is for there to be no marking of coordination or subordination, which also obscures the issue. Crowley expends a large amount of discussion on another type of language-internal complication, which has not featured strongly in the serial verb literature, but will feature more strongly in his description of SVCs in Oceanic: the question of whether some SVCs consisting of contiguous verbs are not verbal compounds instead.

Verbal compounds are word-level constituents, and as such, phonological processes sensitive to word boundaries identify the entire verbal combination

as a single word. The verbs which make up a genuine SVC, in contrast, are each separate phonological words. If a language has no phonological rules which target word boundaries, the task of determining whether a verbal combination constitutes a compound or a SVC will be near impossible, although there is at least some consolation from the consensus in some quarters that it may not be particularly useful or illuminating to draw this distinction in the first place. As Crowley states, ‘the question of whether we should analyse a particular verb-verb sequence as a compound or serial verb has the potential to divert attention away from the real issues’ (2002: 15), alluding to the overwhelming range of similarities that SVCs and verbal compounds display. This sentiment is shared by Durie (1997: 303-5), and by Margetts who, in her description of Saliba, goes so far as to claim that ‘the term “compound” does not by definition contradict an analysis as serialization’ (1999: 101).

While the absence of phonological processes sensitive to word boundaries can render the task of distinguishing between SVCs and compounds impossible, another confounding factor in attempting to establish the status of a verbal combination is the difficulty that linguists without extensive phonetic training face when applying subtle phonological rules. Crowley makes this point in connection with Lehman’s (1988: 192) claim that SVCs should constitute a single intonational unit, in contrast with subordinate or coordinate clauses. Judgments about what constitutes an intonational unit are likely to be unreliable and intuitive in all but the minority of linguists with a detailed practical knowledge of phonetics, and intonation in particular. For this reason, Crowley advises that intonation should not be used as a sole means of identifying SVCs by those who do not possess such expertise, identifying himself with this latter group. This is admirably honest, and in practice a sensible and realistic caution for a field worker to bear in mind.

Besides verbal compounds, another type of multi-verb construction closely related to SVCs are clause chains, which are sequences of verb phrases not separated by coordinators or subordinators, but which do not share the same tense-aspect-mood inflections. Crowley encapsulates the rich array of SVCs, and constructions resembling SVCs, in the following structural continuum (2002: 18):

3. VERBAL COMPOUNDS > NUCLEAR SERIAL VERBS > CORE SERIAL VERBS >
 CLAUSE CHAINS > SUBORDINATE CLAUSES > COORDINATE CLAUSES

This continuum is seen to involve a gradual loosening of syntactic juncture, and Crowley concludes from it that ‘it may be wishful thinking to assume that

we can come up with a universally applicable definition of verb serialization' (18). In accord with this statement, and with Lord's (1993: 2) often quoted statement that SVCs may be best characterized as a 'syndrome of features and phenomena' rather than a discrete universal category, he adopts Bradshaw's (1982: 28) broad definition of SVCs as his working definition. Under Bradshaw's definition of SVCs:

4. • there are tight restrictions on the nominal arguments associated with each verb;
- there is no contrast in the basic inflectional categories of serialized verbs;
- there is no grammatical or intonational marking of clause boundaries between the verbs.

I agree with Schiller (1990: 35) that this definition lacks formality and accuracy. What remains to be seen at this point in the book is whether the Oceanic serial verb phenomena Crowley presents really is so diverse as to warrant such a weak definition of SVCs, or whether he can refine the definition in any way.

3. The Oceanic Perspective on SVCs

Crowley's synchronic description of serial verbs in Oceanic is spread across Chapters Two, Three, most of Chapter Four, and Section 5.3 of Chapter Five. Chapter Two opens with a general description of Oceanic languages and some of their characteristic features, and outlines two ways of categorizing SVCs: in terms of argument sharing between the verbs, and the level of 'juncture' between the verbal constituents. Regarding the latter, Foley and Olson (1985) first applied the notion of juncture to SVCs; according to them, the clause exhibits the three layers of periphery, core, and nucleus (each layer with its own set of operators), and SVCs may represent either the juncture of two clausal cores, or two nuclei. The former are *core-layer* SVCs and the latter *nuclear-layer* SVCs; I will further consider this distinction – which has been adopted exclusively in the description of Oceanic SVCs – in conclusion to this section, but for now the most that need be observed is that core-layer SVCs are looser, or higher-level, combinations of verbal constituents which typically display inflection on each verb and the intervention of an object between the two verbs, whereas nuclear-layer SVCs are tighter combinations in which no object intervenes, and the entire combination receives only one set of inflectional markers.

Crowley demonstrates that SVCs can exhibit one of five schemes of argument sharing, using examples from Paamese: (i) same-subject sharing as in (5), where the subject of the first verb is also the subject of the second verb; (ii) switch-subject sharing as in (6), where the object of the first verb is the subject of the second verb; (iii) inclusory serialization as in (7), where the subject of the second verb includes both the subject and object of the first verb; (iv) multiple object serialization as in (8), where each verb is transitive and has its own distinct object; and (v) ambient serialization as in (9), which actually does not involve argument sharing, since one verb functions semantically as an adverb modifying the other verb, and as such is not associated with a particular participant, but receives third person singular marking by default:

5. inau nauva: to:n aut navul
 inau nau-vaa tooni aute navule
 1SG 1SG:REAL-go miss place Navul
 'I went past (the village of) Navul.' (Crowley 2002: 40)

6. inau nuas vuas he:mat
 inau ni-uasi vuasi hee-mate
 1SG 1SG:DIST.FUT-hit pig 3sg:dist.fut-die
 'I will hit the pig to death.' (Crowley 2002: 55)

7. makurik lovaha
 ma-kuri-ko lo-va-haa
 1SG:IMM.FUT-take-2sg 1DL.INCL:IMM.FUT-go
 'I will take you away with me.' (Crowley 2002: 41)

8. inau nimun si:n hetal tonik
 inau ni-muni siine he-tali tonike
 1SG 1SG:DIST.FUT-drink gin 3 3SG:DIST.FUT-accompany tonic
 'I will drink gin with tonic.' (Crowley 2002: 41)

9. kihuli:n ato kail hemal
 ki-hulii-nV atoo kaile he-malu
 2SG:DIST.FUT-count-OBJ chicken PL 3SG:DIST.FUT-correct
 'Count the chickens correctly!' (Crowley 2002: 42)

Because languages with SVCs typically display little, if any, inflection, the argument sharing status of their SVCs is seldom as apparent as is the case for these Paamese SVCs. Inclusory serialization in particular has received little

attention or recognition, but the inflectional marking in (7) clearly establishes that this is the correct analysis for this case of argument sharing.

Crowley's detailed description of SVCs in Paamese in Chapter Three is elucidating about SVCs in several other respects, which is why I will devote considerable attention to his discussion in Section 3.1. This Paamese case study also brings forth a number of salient features and categories which make the description of SVCs in Oceanic languages in Chapter Four easier to digest. In Section 3.2 I will consider the range of Oceanic SVCs that he discusses.

3.1 Paamese Serial Verb Constructions

Chapter Three on Paamese serial verbs presents a wealth of detail which could be quite hard to take in were it not so well organized. The overall point to take away from this level of detail is that a serial verb system, even within one language, can admit a degree of complexity not commonly attributed to this phenomenon. One manifestation of this complexity is the distinction between core- and nuclear-layer SVCs, for although Crowley admits to choosing to describe these details of Paamese simply because it happens to be the language whose SVCs he is most familiar with, it is not the case that every Oceanic language displays this distinction. Are there any substantive reasons – semantic or otherwise – why certain types of serialization are expressed through core-layer serialization and others through nuclear-layer serialization? I will consider these two types of SVC in turn.

Crowley's exposition of Paamese serial verbs begins with cases of core-layer serialization, and his first task is to prove that these actually are SVCs, and not instances of coordination or subordination. The evidence he provides to show that core-layer SVCs do not present cases of coordination are concerned with constraints on subject marking, the inability to insert a coordinator, patterns of clitic attachment, and mood-polarity interdependencies between the verbs. I will discuss the last kind of evidence only.

While it is a general requirement of SVCs that the verbs involved share the same tense, aspect or mood categories, core-layer SVCs in Paamese present a slight modification to this requirement. A non-initial verb in one of these constructions need not always display the same mood marking as the initial verb (Paamese does not mark tense or aspect), but the mood it does display is dictated by the mood, as well as the polarity, of the initial verb. For example, if the initial verb has realis mood marking and unmarked, affirmative polarity, then the subsequent verb(s) will also have to have realis mood marking and affirmative polarity, but if the initial verb has realis mood marking and negative

polarity, the subsequent verb will have to have immediate mood marking and affirmative polarity (non-initial verbs always have affirmative polarity in core-layer SVCs). If the initial verb has immediate, distant, or potential mood marking, the subsequent verb is required to have identical mood marking, regardless of the polarity of the initial verb. Thus, consider the contrast in meaning between the following two examples:

- | | | | |
|--|------------------|-------------|--------------------|
| 10. sa:k | nakuri | naha: | |
| saaki | na-kuri-e | na-haa | |
| shark | 3SG:POT-take-3sg | 3SG:POT-go | |
| 'A shark might take him away.' | | | (Crowley 2002: 59) |
| | | | |
| 11. sa:k | nakuri | va | |
| saaki | na-kuri-e | ø-vaa | |
| shark | 3SG:POT-take-3sg | 3SG:REAL-go | |
| 'A shark might have taken him but it went away.' | | | (Crowley 2002: 59) |

(10) is a core-layer SVC, but (11) is not, since the first verb *kuri* 'take' and the second verb *vaa* 'go' do not share the same potential mood. Crowley sets out the full range of mood-polarity interdependencies in Paamese core-layer SVCs in a table (2002: 57).

Mood-polarity interdependencies are also used to distinguish core-layer serialization from subordination in Paamese. If one of the small class of main verbs which take a subordinate complement clause has realis mood and affirmative polarity, the subsequent, subordinate verb is required to have immediate mood, whereas realis affirmative initial verbs in core-layer SVCs must be followed by realis affirmative verbs. Furthermore, the two verbs in a subordinate construction can optionally be separated by a 'general' subordinator *kekee*, whereas this does not hold for core-layer SVCs.

Having established that core-layer SVCs do not present cases of either coordination or subordination, Crowley describes eight different types of core-layer SVC in Paamese. The first is directional serialization, exemplified by the following:

- | | | | |
|-------------------------|-------------|-----|-------|
| 12. namual | nauva: | en | leiai |
| na-muali | nau-vaa | eni | leiai |
| 1SG:REAL-walk | 1SG:REAL-go | SP | bush |
| 'I walked to the bush.' | | | |
- (Crowley 2002: 71)

Crowley assigns *muali* 'walk' to the large class of 'non-basic motion' verbs,

and the second verb, *vaa* ‘go’ to a small class of ‘basic motion verbs’. Since the spatial preposition *eni* is ambiguous between locative, allative or ablative interpretations, it is the basic motion verb in (12) which alone determines the allative reading; if this basic motion verb is replaced by another, *mai* ‘come’, then we have the ablative reading:

- | | | | |
|-------------------|----------------|------------|--------------|
| 13. <i>namual</i> | <i>naumai</i> | <i>en</i> | <i>leiai</i> |
| <i>na-muali</i> | <i>nau-mai</i> | <i>eni</i> | <i>leiai</i> |
| 1SG:REAL-walk | 1SG:REAL-come | SP | bush |
- ‘I walked from the bush.’ (Crowley 2002: 71)

Posture verbs can also occupy V2 position in directional serialization, as can any intransitive verb expressing motion or posture. The general schema for directional serialization looks to be that the first verb describes the manner of motion and the second verb the path of the motion, and as such bears a resemblance to a class Crowley later considers under the heading of ‘Serialization of Verbs of Limit’, exemplified by the following:

- | | | | |
|--------------------|--------------------|-------------|-----------------|
| 14. <i>nihalus</i> | <i>hetokol</i> | <i>aut</i> | <i>vauleli</i> |
| <i>ni-haluse</i> | <i>he-tokoli</i> | <i>aute</i> | <i>vaulelii</i> |
| 1SG:DIST.FUT-row | 3SG:DIST.FUT-touch | place | Vauleli |
- ‘I will row as far as Vauleli.’ (Crowley 2002: 76)

But this latter type of serialization differs in that the second verb is transitive (an exception to the rule for core-layer serialization), and it is also the means of expressing comparison, which is not compatible with the notions of manner or path of motion (although it is consistent with the more general notion of direction).

Paamese is typical of Oceanic languages in having a very small class of adjectives, with the vast majority of stative meanings being expressed by stative verbs. These verbs can also appear in core-layer SVCs, in which case they display third person singular marking, and they provide the semantic contribution of a manner adverb. These are ‘ambient’ constructions, exemplified by (9) above. Multiple object serialization was also illustrated above, in (8), although it is conspicuous that Paamese multiple object SVCs do not express the most commonly encountered functions for multiple object SVCs, whereby a verb meaning ‘take’ or ‘use’ typically introduces an instrumental argument, or a verb meaning ‘give’ typically introduces a benefactive argument.

The remaining types of core-layer serialization are auxiliary serialization (where one of three initial verbs expresses an aspectual category), locative

serialization (in which the verb *hite* ‘say’ is serialized after a verb of locution and the entire serial verb takes a complement clause), numeral serialization, and ‘discourse linkage’. The last of these presents an unusual case of serialization, where the placement of *sakini* ‘do’ or *vusi* ‘finish’ in the second position of a SVC in one clause indicates the relationship between the event described in this first clause and the event described in the following clause. For example, if the first clause contains the SVC with *sakini*, this signifies that the event described in the following clause comes about as a result of the event described in the first clause:

- | | | |
|---|---------------------|---------------------|
| 15. eal hekaih | hesakini | ma:d hekurinau |
| ealo he-kaiho | he-sakini-e | maade he-kuri- |
| nau | | |
| sun 3SG:DIST.FUT-strong | 3SG:DIST.FUT-do-3sg | sweat 3SG:DIST.FUT- |
| take-1SG | | |
| ‘The sun will be strong so I will sweat.’ (literally: ‘ ... so sweat will | | |
| take me.’) | | (Crowley 2002: 82) |

Crowley’s discussion of core-layer serialization alone can be seen to support his point that serialization presents a diverse range of phenomena. Another point that becomes apparent from his exposition is that the kind of evidence that has to be produced in order to prove that a certain construction is a SVC can be quite language-particular; for example, the mood-polarity interdependencies which provide a categorical means for identifying Paamese core-layer SVCs are not commonly encountered as a way of establishing serial verb status. Different evidence again is required to prove that certain verb-verb sequences in Paamese constitute nuclear-layer serial verbs.

Nuclear-layer serialization in Paamese can be distinguished from core-layer serialization since there is only one set of inflectional markers in nuclear-layer serialization, attached to the initial verb, and an object can never intervene between the verbs, but must be placed after the entire SVC:

- | | | |
|-------------------------------------|----------|--------------------|
| 16. isal | vini:n | vuas |
| i-sali | vinii-nV | vuasi |
| 3PL:DIST.FUT-spear | kill-OBJ | pig |
| ‘They will spear the pig to death.’ | | |
| | | (Crowley 2002: 83) |

Nuclear-layer SVCs are also distinguished from core-layer SVCs by the attachment of the negative circumfix *ro ... tei* around the entire nuclear-layer SVC, whereas it circumfixes only the initial verb in core-layer SVCs. In

addition, nuclear-layer SVCs, but not core-layer SVCs, can be nominalized.

Having shown that nuclear- and core-layer SVCs are easily distinguished from one another, Crowley demonstrates that nuclear-layer SVCs can be distinguished also from compounds, through phonological rules of stress placement, word-final vowel deletion, shortening and desyllabification that show that the two elements in the SVC constitute separate phonological words. It is fortunate that there are clear phonological criteria for establishing compound status in Paamese, although Crowley does not maintain that compounds and nuclear-layer SVCs should be rigidly delineated as separate phenomena, pointing to a class of verb-verb sequences (containing vestigial transitive suffixation) which phonologically are compounds, but which nevertheless behave identically to nuclear-layer SVCs. He also discusses some non-phonological respects in which nuclear-layer SVCs display behaviour which might be expected of compounds.

One aspect of nuclear-layer serialization that Crowley identifies with compounds is the propensity for the meaning of the serial verb combination as a whole to be unpredictable from its separate verbal parts. This is indeed typical of compounds, but it is also frequently observed above the word-level of grammar; with respect to SVCs, for example, Durie points out that non-compositionality can be found in both cases of core-layer ('non-contiguous') serialization and nuclear-layer ('contiguous') serialization (1997: 323). In the section on core-layer serialization Crowley gives no indication that these SVCs display any semantic unpredictability, although it seems unsurprising that this property should be concentrated in the area of nuclear-layer serialization. Intuitively, most linguists would probably expect a gradual increase of non-compositionality as the juncture of the combination 'tightens' – although quantifying and accounting for this is another matter.

The other non-phonological respect in which nuclear-layer SVCs resemble compounds is that often an element in a SVC is fixed as such, and cannot appear independently, as the main verb of a simple clause. The elements which are restricted in this way are usually non-initial verbs, and many (but not all) of them can be characterized as semantically adverbial, such as *kirkiriti* 'do idly' in the following example:

- | | | | | |
|-----|---------------------------------|----------------|-----------|--------|
| 17. | kai | muti | kirkirit | ve:va |
| | kaie | ø-mutisi | kirkiriti | veevaa |
| | 3SG | 3SG:REAL-write | do.idly | paper |
| | '(S)he scribbled on the paper.' | | | |

(Crowley 2002: 85)

According to Crowley, there are two possibilities for the mode of argument sharing of nuclear-layer SVCs: same-subject sharing (18), or switch-subject sharing (19):

- | | | | | |
|-----------------------------------|----------------|-------------------|-------|----------|
| 19. inau | nelah | pilun | tu:s | onak |
| inau | ne-lahi | pilu-ni | tuusi | ona-ku |
| 1SG | 1SG:REAL-carry | stick.together-TR | book | poss-1SG |
| 'I carried my books in one hand.' | | | | |

Observe, however, that the second, underlyingly intransitive verb in (19), *pilu* ‘stick together’, has a transitivizing suffix. Crowley analyzes (19) as a switch-subject construction ‘in which the object represents the patient associated with “carry” and the agent of “stick together”, though it is formally expressed as the object of the transitivized form of the verb “stick together”’ (2002: 90), but if the syntactic object of *pilun* ‘stick together’ is *tu:s onak* ‘my book’, then what is its syntactic subject? It seems more likely that it would be the first person pronoun, rather than *tu:s onak* ‘my book’, in which case (19) represents syntactic

same-subject argument sharing, even if it is semantically switch-subject. In the nuclear-layer SVCs of some of the other Oceanic languages that Crowley discusses in Chapter Four, the transitivity affix in similar circumstances will specifically be a causativizing affix, such as *he-* in the Saliba example in (20), in which case there is transparent convergence between syntactic same-subject sharing and semantic same-subject sharing (i.e. *(s)he* hit it and *(s)he* caused it to be dead):

20. *ye-koi-he-m^waloi-ø*
 3SG-hit-CAUS-dead-3SG
 ‘(S)he hit it dead.’ (Crowley 2002: 139)

But this is taking us into the territory of the next section; the more general point to take away from the transitivity of verbs in nuclear-layer SVCs such as (19) is that the argument structure of the verbs is required to be more uniform than for core-layer SVCs (with matching transitivity status for the verbs being a manifestation of this). This is one of the major differences between core- and nuclear-layer SVCs. In terms of the semantic functions they express, directional serialization must be expressed at the core layer in Paamese, while manner serialization, among other functions, can be expressed at either layer, with no apparent grounds for determining which.

3.2 *Serial Verb Constructions in other Oceanic languages*

The scarcity of serial verb data in Oceanic was already remarked upon in the introduction, although, on the brighter side, Bradshaw (1982) was the first to provide a substantial body of work about serial verb phenomena in Oceanic, with data from a number of structurally diverse languages of the New Guinea area, and from the 1980s there has been an increasing amount of work in this area. In Chapter Four Crowley considers fourteen Oceanic languages besides Paamese, and their SVCs. The languages are chosen so as to be representative of as wide a range of subgroupings and geographical spread possible. Two primary questions to ask are: what are the general characteristics of Oceanic SVCs? And, how representative is Paamese of SVCs in Oceanic?

One feature of SVCs in Oceanic which emerges is that, unlike Paamese, most verbs do not have both core- and nuclear-layer serialization. The only other languages that have both are Mangap-Mbula, of the North New Guinea subgrouping, and Lewo, of the Central and Eastern Oceanic subgrouping. Lewo is spoken in close proximity to Paamese, and the serial verb systems of these languages display many similarities. Of the other languages, only Loni

of the Admiralties subgroup and Numbami of the North New Guinea subgroup have core-layer SVCs; the rest all have nuclear-layer SVCs (a small number of which are ambiguous with compounds). This suggests that nuclear serialization is the commoner pattern in Oceanic overall, whereas the predominant pattern in non-Oceanic serial verb studies so far has been core-layer serialization.

One pattern of serialization conspicuously all but absent from Crowley's description of SVCs in these languages is instrumental or benefactive serialization, where verbs with meanings like 'take' or 'use' and 'give' license instrumental and benefactive arguments respectively. These have been among the most commonly described SVCs in previous non-Oceanic studies, although the only case to be found in Crowley's survey of Oceanic is in the Numbami language of the North New Guinea subgrouping, where a verb meaning 'hold' appears in an instrumental SVC. The types of SVCs in Oceanic which do appear repeatedly are ambient serialization, directional serialization, and SVCs with resultative semantics, although there do not seem to be any convincing grounds for correlating any of these functions with either core- or nuclear-layer serialization across Oceanic languages.

Because much of the discussion up until this point has been concerned with the distinction between core- and nuclear-layer SVCs, and because this is a distinction which has been exclusively seized upon in Oceanic, it seems appropriate to address the foundations of this distinction and what it really signifies. I have some doubts about the theoretical soundness of this distinction, and I sense that Crowley does too, judging from his reluctance to support Foley and Olson's (1985) model, and in particular the claim that there are 'necessarily just three levels of structural juncture within a clause' (Crowley 2002, 43). As mentioned in the introduction to this section, these three levels are the periphery, the core and the nucleus, and Foley and Olson (1985) claim that semantic operators apply to each. The nucleus is the innermost layer, and its operators express information about aspect, one example being the adverb *completely*. The core encompasses the nucleus and the core arguments of the predicate, and the operators at this level will accordingly have these elements in its scope. The periphery is the outermost layer, and its semantic operators typically provide information about the temporal and spatial frames of the event.

One feature of this distinction which I find suspicious is the fact that actors and undergoers are treated as being on the same level, as constituents of the core, when most current analyses would treat the actor as being at a higher level, although this may be just another manifestation of the same uncertainty

that Crowley expressed regarding the restriction of the model to only three levels. Foley and Olson (1985) do use serial verb data to give a demonstration of the distinction between core- and nuclear-layer juncture, and how adverbial operators apply to each, but as far as I can see, all that they are showing is that 'core-layer' SVCs consist of a structurally looser combination of verbal constituents in which an adverb may intervene and thus modify a single constituent in isolation, whereas 'nuclear-layer' SVCs form a tighter combination of verbs in a single, inseparable constituent, no part of which can be modified separately by an adverb. Foley and Olson do not show that these syntactically looser and tighter combinations are correlated with semantic levels such as adverbial operators might define. They claim that an adverb *isema* 'wrongly' in Barai is a nuclear operator, and that it accordingly displays the behaviour expected of a nuclear operator in core- and nuclear-layer SVCs, but I suspect that its distribution and scope of modification instead falls out from the relevant constituency facts, rather than its semantic level status. Moreover, Foley and Olson do not in the first place actually prove that *isema* is a nuclear operator, and in fact it would be surprising if it were if it bears any semantic resemblance to the English adverb *wrongly*, which, as an agent-oriented adverb, has scope over the actor – a constituent of the core level.¹

Crowley does not ally himself with Foley and Olson's model, but instead proposes to adopt their terminology of 'core-layer' and 'nuclear-layer' SVCs because it is 'useful' in the description of Oceanic SVCs (2002: 43). A more theory-neutral distinction would be between contiguous and non-contiguous SVCs (Durie 1997 uses this terminology), although Crowley's discussion of Paamese suggests that varied degrees of structural tightness in SVCs are not limited to the question of whether an object may intervene between the two verbs, but are also reflected by patterns of inflectional marking. Can the instantiation of separate sets of inflectional markers for each verb in a SVC be independent of the question of whether an object may intervene between these verbs? Whatever the case, Foley and Olson's model, rather than being definitive, opens up several questions about the distinction between core- and nuclear-layer SVCs. Should there be more levels and more kinds of juncture? Are particular functional types of SVCs correlated with certain semantic operators irrespective of structural factors? Clearly, our understanding of the syntax-semantic interface for SVCs would profit immensely from detailed examinations of how semantic operators (including, but not confined to, adverbs) of different levels apply to SVCs of differing structural characters, although the difficulty that this faces is that it is often no easy matter to ascertain the semantic level of an operator.

4. Reconstruction, Dissolution, and Diffusion of Serial Verbs in Oceanic

Having described a range of SVCs in a wide array of Oceanic languages in Chapter Four, Crowley puts forward a case for reconstructing serial verbs in Proto Oceanic, which I will discuss in Section 4.1. Naturally, with such a proposal comes some obligation to indicate how, and why, SVCs in current Oceanic languages have diverged and developed from the original proto-construction, and so Crowley demonstrates some probable paths of grammaticalization, or other possible diachronic developments, in Chapter Five. In Chapter Six, Crowley examines diffusion of SVCs in Oceanic from a different perspective. Here he is concerned, not with how SVCs may have diffused in Oceanic languages such as those described in Chapter Four, but how SVCs may have diffused into Oceanic pidgins. Crowley's observations, which I will address in Section 4.2, provide a valuable new contribution to the debate over whether SVCs in pidgins emerge from substratal influences, or whether they reflect universal 'bioprogrammatic' features of human language which emerge when speakers are faced with deficient input, as Bickerton (1989) argues.

4.1 The Case for Reconstruction of Serial Verbs in Proto Oceanic

Extensive work in phonological, grammatical and lexical reconstruction has established that Oceanic languages constitute one family, descended from a common ancestor referred to as Proto Oceanic (Ross 1988, Lynch et al. 2002). Crowley turns his attention to the reconstruction of serial verbs in Proto Oceanic, first laying out the principles upon which inferences concerning syntactic reconstruction can be based. Methodologically, Crowley's attempt at reconstruction is extremely sound as one would expect, although the data from which he draws any inferences is still very limited, and so considerable uncertainty will naturally stem from this.

Crowley (2002: 163) observes that nuclear-layer serialization is widely distributed in Oceanic languages, and that it is difficult to make generalizations about its functions (it is also more prone to idiosyncrasy). From this he infers that nuclear-serialization is a very old pattern which may have been a feature of Proto Oceanic, whereas this is not the case for core-layer SVCs, which may represent more recent developments. Further support for this position comes from the observation that nuclear-layer SVCs in Oceanic are less likely to express directional serialization, which is placed at the 'most accessible' end of Foley and Olson's (1985) accessibility hierarchy for serial verbs, and they

are also more likely to contain transitive verbs, which rank among the least accessible in Foley and Olson's hierarchy. 'Accessibility' in this hierarchy basically refers to the concept of how easily an item enters into a SVC, or else what kinds of functions are most easily or readily expressed through serialization. The fact that the items and functions that characterize nuclear-layer SVCs rank among the least accessible lends support to the idea that they are more entrenched and thus older.

Crowley draws attention to the fact that, if nuclear-layer SVCs represent an older pattern, this is also consistent with Bradshaw's (1982) alternative hypothesis concerning the evolution of SVCs in Oceanic: that they are the result of diffusion of nuclear-layer SVCs from the neighbouring non-Austronesian languages of Melanesia. One supporting factor for this is the fact that the Oceanic languages of Micronesia and Polynesia do not generally exhibit SVCs (with the exception of Fijian). This areal diffusion hypothesis might also receive some support from the fact that some non-Oceanic Austronesian languages in the general vicinity of Papua New Guinea also exhibit nuclear-layer serialization. For while Crowley makes the general point that 'verb serialization is not a feature that is widely referred to in the more westerly groupings of Austronesian languages spoken in Indonesia, the Philippines, and Taiwan' (2002: 124), it could be significant that at least three Central Malayo-Polynesian languages of eastern Indonesia have SVCs: Tetun Dili spoken in East Timor has nuclear- and core-layer SVCs (Williams-Van Klinken et al. 2001); further west, to the island of Sumba, Kambara has nuclear-layer SVCs (Klamer 1998, 275-83); and at the western boundary of Central Malayo-Polynesian, Bima has extensive patterns of nuclear-layer serialization (this is the Austronesian language that I am most familiar with).²

In any case, although Crowley is looking to reconstruct verb serialization in Proto Oceanic, he remains open to the possibility that it is instead the result of diffusion. In Chapter Five, he examines some apparent cases of dissolution of SVCs in Oceanic through grammaticalization, or other processes. Here the evidence is far too limited or sparse to convincingly argue that various patterns of serialization represent the remnants of Proto Oceanic serialization, although Crowley does present a convincing case for the evolution of serialization in a lower-level grouping of Southern Vanuatu languages. Languages such as Erromangan display an 'echo subject' prefix *m-*, which appears on the second verb in sequence and fills the general subject prefix slot (which could otherwise be occupied by subject prefixes specifying person or number):

21. *yau* *yoxox-velom* *moʔhi* (< m-oəʔh-i)
 1SG 1SG:REC.PAST-come ES-see-3SG
 ‘I came and saw him.’ (Crowley 2002: 181)

This prefix indicates that both verbs share the same subject, and the entire construction has an interpretation typical of a SVC. Crowley discusses other southern Vanuatu languages which have this construction, or related variants of it, and posits that echo subject marking evolved from a coordinator **ma* at a low-level Proto-Southern Vanuatu group (2002: 206). This reconstruction is on surer ground than his Proto Oceanic reconstruction, and he can furthermore hypothesize that the emergence of echo verb constructions in these Southern Vanuatu languages is not unrelated to the existence, and subsequent decay of SVCs in these languages, since the echo verb constructions appear to fulfil similar functions to SVCs in northern Vanuatu languages.

4.2 Oceanic Serial Verbs and Melanesian Pidgin

The question of whether, and how, a SVC can diffuse from one language to another through contact is of crucial importance to the diachronic issues considered in the previous section, but it is also pertinent to an intriguing debate concerning serialization in pidgin and creole languages. Bickerton (1989) argues that SVCs appear in pidgins as a consequence of deficient linguistic input, and that they are a manifestation of ‘bioprogrammatic’ features of human language. Other linguists, such as McWhorter (1992), argue instead for substrate origins in patterns of verb serialization in pidgins and creoles. Up until now, the literature concerning this debate has involved data chiefly from West African languages and Atlantic creoles, but now, from the increasing amount of work on SVCs in Oceanic languages, it has become clear that SVCs in Oceanic pidgins may also be the product of substratal influence. Crowley is in a position to draw all the evidence together and determine whether or not this is true.

The strongest evidence against Bickerton’s bioprogrammatic hypothesis is the fact that Oceanic pidgins, and Oceanic languages in general, seldom display instrumental or benefactive case role serialization (where one verb, typically ‘take’/‘use’ or ‘give’, encodes an instrumental or benefactive case role respectively). These functions are ubiquitous in Atlantic creoles and their West African substrates. It would then appear that these particular SVCs in pidgins or creoles do not result from universal features of human language; rather, their presence in West African substrates determines their presence in the

respective Creoles, and their absence in Oceanic languages determines their absence in Oceanic pidgins.

Crowley pursues the issue further by attempting to determine whether SVCs in the three Melanesian Pidgins (Bislama, Solomon Islands Pijin, and Tok Pisin) each resemble the SVCs in their respective substrates most closely. Here he has the most success with Bislama and its substrate languages of Vanuatu. Bislama has nuclear-layer SVCs just as its substrates do, and it also has core-layer SVCs whose functions mirror those of core-layer SVCs in the substrate languages. For Solomon Islands Pijin there is less data, and for Tok Pisin, although there is a considerable amount of data, the issue is clouded by the number, and lack of homogeneity, in the range of substrates. Nevertheless, the observations about Bislama and its substrates still present significant support for the role of substratal influence in the emergence of SVCs in pidgins. At the same time, Crowley maintains the basic functionalist position that universal pressures (but not bioprogrammatic pressures) may play some role in the development of SVCs. A good illustration of this is the observation that the lack of inflection in Bislama may have caused it to take some independent paths of grammaticalization in contrast to its richly inflected substrates (2002: 251).

5. Conclusion

Serial Verbs in Oceanic is an invaluable addition to the literature on serial verbs, and Crowley deserves full credit for contributing to a more balanced representation of the distribution of SVCs across the languages of the world. This must be borne in mind when considering the limitations of this work – limitations which are mostly excused by the lack of Oceanic serial verb data. Maybe this isn't a very comprehensive typology of serial verbs in Oceanic, but it seems clear that this isn't possible quite yet, and besides, personally, I found the detailed description of Paamese serial verbs more elucidating than any surface survey of SVCs across many languages. It is a credit to Crowley's versatility that he goes beyond the scope of synchronic description of Oceanic serial verbs to address diachronic issues, even if his reconstruction efforts in particular are hampered by the lack of data. I found his discussion of SVCs in Melanesian pidgins and the issue of substratal influence in their development extremely pertinent and convincing.

Crowley takes one of the major points of his book to be that SVCs are

diverse, and do not constitute a unitary class. This isn't earth-shattering news from a perspective such as that of Lord (1993), who describes serial verbs as a 'syndrome of features and phenomena', although Crowley does show, more impressively than ever before, the level of diversity that can be confined within the serial verb 'system' of one language. At the same time, this diversity does not seem very damaging for the most commonly accepted definitions of SVCs. Most definitions of SVCs do not preclude the possibility that a wide range of semantic functions may be encompassed, although a more problematic feature of Paamese SVCs is the lack of productivity that nuclear-layer constructions tend to show. In this respect, nuclear-layer SVCs are more like compounds, but this is to be expected if serial verbs are seen in a continuum, and it also reinforces the point that serial verbs and compounds have much in common.

As its title would suggest, this book is not preoccupied with formal, theoretical aspects of SVCs, and in his conclusion Crowley mentions his reasons for avoiding formal issues. SVCs came to be viewed as a problem for syntactic theory in the 1960s, and they accordingly received a raft of transformational treatments which now seem rather unrealistic. Crowley is understandably suspicious of these, as well as more recent formal efforts; in Chapter Two, for example, he draws attention to Baker's (1989) theoretical claim that languages with SVO word order cannot display contiguous, or nuclear-layer SVCs – a claim which is clearly disproved by much of the data we find in Crowley's book (as well as some earlier work on Oceanic SVCs).

Ideally, there should be some kind of dialogue between formal and descriptive approaches, such that formal accounts have to answer to the real language data that descriptive approaches present. One indication that this, sadly, does not happen is Collins (2002), who identifies sequences of two separate orthographic verbs in the African (Khoisan) SVO language ≠Hoan as compounds, without any indication that they constitute a single phonological word, and (I can only guess) on the basis of Baker's (1989) claim that verb-verb sequences in SVO languages must be compounds.³ Crowley closes his book with a call to descriptive linguists 'to provide detailed accounts of surface facts of serial verb constructions' (2002, 267). I agree that linguistic description should receive more attention and dedication, although it may also not be a bad thing if linguistic data receives more recognition from the linguistics community as a whole when its impact upon non-trivial theoretical issues is recognized and clearly presented.

Notes

- 1 Agent-oriented adverbs attribute the property described by the adverb to the agent instead of just providing manner modification for the verb. It is because *wrongly* is an agent-oriented adverb that the sentence *he ate the apple wrongly* can be paraphrased as *it was wrong of him to eat the apple*, whereas *he ate the apple quietly* cannot be paraphrased as *#it was quiet of him to eat the apple*, since *quietly* is not an agent-oriented adverb.
- 2 All of these Central Malayo-Polynesian languages have SVO word order, which would fail to corroborate Bradshaw's (1982) hypothesis that nuclear serialization diffused in conjunction with the adoption of SOV word order from non-Austronesian languages.
- 3 Collins proposes to account for the 'unmistakable' parallelism (2002: 5) between ≠Hoan verbal compounds and SVCs through multiple verb movement operations, which would be entirely superfluous in the case that Hoan verb-verb sequences are actually SVCs!

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