Compounds and serial verbs in Vitu:
a scalar approach

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Abstract: This paper shows that the distinction between verbal compounds and serial verb constructions in Vitu (an Oceanic language of Papua New Guinea) is not a binary distinction, but rather shows scalar features. Language-specific criteria that are used to define compounds and serial verb constructions in this language lead to the recognition of various intermediate categories.

Key words: compound, serial verb construction, scalar, Vitu, Oceanic

1. Introduction

Providing accurate and unambiguous definitions for various linguistic terms, and then linking them to concrete language phenomena, often turns out to be a challenging exercise. Examples range from defining a phoneme inventory (do loan phonemes count? how about very low-frequency native phonemes?), the notion of irrealis (are imperatives and negated clauses included?), ergativity (is there such a thing as word order ergativity?), as well as compounds and serial verb constructions, the topic of this paper. Even though a core meaning and some typical examples are relatively easily defined, the outer edges of these terms tend to be fuzzy, while defining criteria may not always match up.

It is fairly obvious that the total variety of linguistic phenomena that a linguist is confronted with cannot be neatly squeezed into the small set of existing categories. Rather than give up on the notion of pre-established categories altogether (Haspelmath 2007), or create more and more subdivisions, it seems that a prototype approach is the most promising avenue to tackle this (see Ungerer and Schmidt 1996), as it allows for a range of typical and non-typical examples on a continuum. Such a scalar approach also reflects reality, where binary oppositions such as *night* and *day*, *land* and *sea*, *child* and *adult* refer to clear focal points on a continuum, with some intermediate points also lexicalised (e.g. *dawn*, *beach*, *teenager*). In addition to a prototype approach, it is also helpful to distinguish general linguistic concepts from language-particular categories (often capitalised), such as
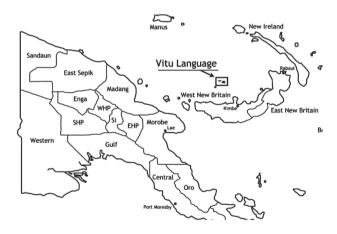
the perfect versus the English Perfect, along the lines of Comrie (1976).

This paper deals with the issue of compounds and serial verb constructions (hereafter SVCs) in Vitu, a western Oceanic language of Papua New Guinea, approached from a scalar perspective.[i] After a brief general introduction to the Vitu language (§2), I will present the issue at hand (§3), dismiss one possible analysis (§4), then follow with a discussion of compounding (§5) and a variety of SVCs (§6). The conclusion is presented in §7. The analysis in this article overlaps with the description given in van den Berg and Bachet (2006), though the approach is radically different.

2. Vitu: the language

2.1 Location and affiliation

Vitu [wiv] is spoken on small islands off the north coast of West New Britain, Papua New Guinea (see map). The population is around 7,000. In addition to Vitu the population also speaks Tok Pisin. Education is mostly in English.

MAP. VITU IN PAPUA NEW GUINEA

Vitu is an Oceanic language, part of the large Austronesian family, and more specifically a member of the Bali-Vitu family, a subgroup of the Meso-Melanesian cluster within the Western Oceanic linkage (Lynch, Ross and Crowley 2002:883). Even though Bali and Vitu are listed as "possibly [a] single language" by Lynch, Ross and Crowley, it is clear that they are not. The lexical and structural differences are considerable, and native speakers always stress the separate identity of the two languages.

This section summarises the main typological features of Vitu, based on van den Berg and Bachet (2006), focussing on phonology and morphosyntax. In many ways Vitu is a

conservative Oceanic language, apparently hardly influenced by Papuan languages.

2.2 Phonology

Vitu has five vowels: /i ɛ ɑ ɔ u/, and 14 consonants: /ptk bdg mnŋ βðɣ rl/. The phoneme /s/ occurs in loanwords. The practical orthography employed for Vitu uses <v> for /β/, <z> for /ð/; <h> for /ɣ/ and <ng> for /ŋ/. The voiced stops are usually prenasalised, while /t/ is realised as an alveo-palatal affricate [ʧ] before /i/: *beti* [ˈmbɛʧĩ] 'banana'. There are no final consonants (except in recent loans) and no consonant clusters. V and CV are therefore the only syllable types in native vocabulary. However, some final consonants have been retained as lexically-determined thematic consonants when affixes appear. An example is the transitivising affix *-Ci*: compare *hinu* 'drink' with *hinu-mi-a* 'drink it', with the suffix *-mi*, reflecting Proto-Oceanic **inum* 'drink' and **inum-i-a* 'drink it' (Lynch, Ross and Crowley 2002:80). Other final consonants have been re-introduced (see van den Berg and Bachet 2008). Stress is penultimate.

2.3 Morphosyntax

- Constituent order is SVO. Within the noun phrase the order is Article-Noun, Noun-Demonstrative, Noun-Adjective, Noun-Numeral and Noun-Relative Clause. The language uses prepositions.
- The pronominal system has three numbers (singular, dual, plural), a clusivity distinction for first person non-singular, and no gender. There are three pronominal paradigms: free pronouns, object suffixes/enclitics, and possessive suffixes/enclitics. There is considerable formal overlap among the three paradigms for the non-singular forms (see table 1).

TABLE 1. PRONOMINAL PARADIGMS

		free pronoun	object suffix / enclitic	possessive suffix / enclitic
SG	1	*hau*	*-au / -u*	*-gu*
	2	*ho*	*-ho*	*-V*
	3	*ia*	*-a / Ø*	*-na*
DU	1 EX	*miro*	*-miro*	*-miro*
	1 IN	*toro ~ to*	***-d**oro*	***-d**oro ~ **-d**o*
	2	*moro ~ mo*	*-moro*	*-moro ~ -mo*
	3	*hiro*	*-hiro*	*-hiro*
PL	1 EX	*hita*	*-hita*	*-hita*
	1 IN	*tolu*	***-d**olu*	***-d**olu*
	2	*miu*	*-miu*	*-miu*
	3	*dia*	*-dia*	*-dia*

- There are three types of possession: inalienable possession (on most body parts and kinship terms, with possessive suffixes or enclitics directly attached to the verb), edible possession (using the possessive classifier *ha-*), and general possession (using the classifier *ka-*). These are illustrated by the following 1SG examples on the nouns *lima* 'hand, arm', *beti* 'banana' and *vaga* 'canoe': *lima-gu* 'my hand/arm'; *ha-gu beti* 'my banana'; *ka-gu vaga* 'my canoe'.
- There is little nominal morphology, except for possessives and nominalisations.
- Verbal morphology is limited to causative *va-*, reciprocal *vari-*, multiple object *vai-*, as well as a transitivising and passive morphology (see next points).
- There are three classes of transitive verbs (citation forms show 3SG object *-a*, translated as 'it' or 'him/her').
  - Class 1 takes object suffixes/enclitics directly (all of these have root-final *i* or *e*): *hani-a* 'to eat it', *hubi-a* 'to hit it', *pade-a* 'to spear it'.
  - Class 2 also takes object suffixes/enclitics directly, but it has the allomorphs Ø for 3SG and *-u* for 1SG. All verbs in class 2 have a root-final *a*: *luga* 'to carry (it)', *vala* 'to give (him/her)', *varaga* 'to throw (it)'.
  - Class 3 needs the transitivising suffix *-Ci* before the object suffixes/enclitics can be added. (C stands for a thematic consonant, usually a retained original final consonant.) Examples are given in (1).

  (1) *hule*   'to ask' (intr)   *hule-ni-a*   'to ask him/her.'
       kozoho   'to be near'   *kozoho-ti-a*   'to be near to it, approach it'
       longo   'to hear, obey'   *longo-ri-a*   'to hear it, listen to him/her'
       tangi   'to weep'   *tangi-zi-a*   'to weep for him/her.'

- Very unusual for an Oceanic language, Vitu has a morphological agentless passive; marked by either vowel umlaut (*i > u* or *e > o*), by the change *-Ci-a > -Ca*, or by the suffix *-nga*. This is illustrated in (2), where the first column shows the active forms (*-a* marks 3SG object), while the third column shows the corresponding passive forms. For further details and the possible origin of this system, see van den Berg (2009).

  (2) *hani-a*   'to eat it'   *hanua*   'to be eaten'
       hubi-a   'to hit it'   *hubua*   'to be hit'
       pade-a   'to spear it'   *padoa*   'to be speared'
       pele-a   'to take, get it'   *peloa ~ peola*   'to be taken, to be got'
       haba-ti-a   'to build it'   *haba-ta*   'to be built'
       taru-hi-a   'to put it'   *taru-ha*   'to be put'
       varaga   'to throw it'   *varaga-nga*   'to be thrown'

- There is extensive use of obligatory portmanteau preverbal particles which mark person-number as well as aspect, mood and sequentiality (AMS). Eight AMS categories are distinguished: realis, irrealis, perfect, continuity, sequentiality, purpose, indefinite future and imminent future. These are shown in table 2.

TABLE 2. ASPECT-MOOD-SEQUENTIALITY MARKERS

	GLOSS	1SG + ALL NON-SINGULARS	2SG	3SG
realis	R	*ta*	*tu*	*e, Ø*
irrealis	IRR	*na*	*nu*	*ni*
perfect	PF	*te*	*tu*	*ti*
continuity	CONT	*ka*	*ku*	*ki*
sequentiality	SEQ	1SG: *kene* non-singular: *kene ~ kini*	*kunu*	*kini*
purpose	PURP	*kata*	*koto ~ kutu*	*kete ~ kiti*
indefinite future	FUT	*data* (1SG only)	*datu*	*dati ~ da e*
imminent future	IMM	1SG: *katane* non-singular: *katane ~ keteni*	*kotonu*	*keteni ~ kitini*

3. The issue

The issue of defining serial verb constructions and compounds in Vitu is best approached by starting with some concrete examples. The basic issue is this: a number of verbal structures are clearly identifiable as compounds or as SVCs, but other structures are less easily pigeonholed. On the basis of criteria outlined below, example (3) is a straightforward compound, while example (4) is an unambiguous SVC. But is (5) a compound or a SVC? And is (6) a SVC or a biclausal construction? (All relevant verbs are underlined in this paper.[ii])

    (3) *Dia ta <u>hara-mate-hi-a</u> boro.*
          3PL R bite-die-TR-3SG pig
          'They bit the pig to death.'

    (4) *Dia ta <u>ngiti</u>   <u>mai</u>.*
          3PL R show.teeth come
          'They are smiling (towards the speaker).'

    (5) *Ia   gotala ia   <u>hada lala</u>   tu-na.*
          3SG   go.out 3SG see   know child-3SG
          'She went outside and recognised her child.'

(6) *Hita   ta   <u>hare-hi-a</u>   bot   <u>vori</u>.*
     1PL.EX R   pull-TR-3S   boat   go.inland
     'We dragged the boat up the shore.'

These questions can only be answered by providing clear and unambiguous criteria. The following general criteria are usually listed to help identify compounds versus serial verbs in individual languages (see also Aikhenvald 2007):

- compounds have a single stress assigned to the whole verb-verb sequence;
- compounds may undergo phonological processes that are sensitive to word boundaries;
- compounds may show special bound forms;
- compounds tend to have limited productivity.

The following criteria are often listed as the prototypical defining features of a SVC (see Durie 1988, Crowley 2002, Aikhenvald 2006, 2018):

- a SVC is a sequence of two or more verbs joined together without any connecting words, acting as a single predicate;
- there is no overt marking of coordination or subordination;
- the verbs share one or more arguments;
- the verbs have the same tense, aspect, mood and polarity value;
- each component verb must be able to occur on its own;
- the sequence describes what is conceptualised as a single event.

Notice that orthography is not listed as a criterion, since it is only a convention. The current Vitu practical orthography writes both compounds and serial verb constructions as separate words, whereas this paper writes compounds hyphenated, as in (3). This is done for linguistic reasons which are explained in §5.

Since the criteria do not always yield clear and unambiguous answers, the question can be asked how different verbal compounding actually is from serialisation. Is this a binary opposition? Could verbal compounding be subsumed under verb serialisation? Or is it a continuum? The literature on SVCs is large and still growing and not all the answers are identical. Crowley (2002) reanalyses some cases of compounding in descriptions of Oceanic languages as 'nuclear serialisation'. Aikhenvald (2006, 2018) allows for verb serialisation which results in one grammatical and/or phonological word. We seem to be dealing here with a cline, consisting of focal points, but with fuzzy boundaries and various degrees of bonding and grammaticalisation.

Such a scalar approach is helpful for Vitu. In the following sections we will develop language-specific criteria for compounds and SVCs, and categorise the relevant examples.

Since the focus of this paper is on structural properties, the semantics of compounds and SVCs will only occasionnally be referred to, but will not be discussed in detail.

4. A prefix?

Before listing the language-specific criteria for distinguishing compounds from SVCs in Vitu, it is helpful to briefly discuss (and dismiss) one further analytical possibility. Consider again example (3), repeated as (7), and a similar construction in (8).

(7) *Dia ta <u>hara-mate-hi-a</u> boro.*
    3PL R   bite-die-TR-3SG pig
    'They bit the pig to death.' (Lit. 'They bite-die the pig.')

(8) *Dia ta <u>hubi-mate-hi-a</u>   kaua.*
    3PL R   hit-die-TR-3SG   dog
    'They killed the dog.' (Lit. 'They hit-die the dog.')

The question is: what is the best way to analyse this construction? What is the status of *hubi* and *hara?* There are three theoretical possibilities:

a. The elements *hubi* and *hara* are prefixes attached to the root *mate*.

b. The elements *hubi* and *hara* are the first part of a compound verb.

c. The elements *hubi* and *hara* are independent verbs in a serial verb construction.

In a discussion on similar constructions in the neighbouring language Bali, Ross (2002:374) comments:

> "The prefixes indicating manner of causation are transparently related to independent verbs:

> | | | | |
> |---|---|---|---|
> | *hara-* | 'by biting' | *harati-* | 'bite' |
> | *vaka-* | 'by stepping on' | *vakazi-* | 'step' |
> | *bara-* | 'by pushing' | *barati-* | 'push' |
> | *paho-* | 'by grasping' | *pahori-* | 'grasp' |

> All of these prefixes may combine, for example, with *putu* 'break (ITR [intransitive])' or *mate* 'die', to form transitive verbs, e.g. *hara-putu-hi-* 'break by biting', *hara-mate-hi* 'kill by biting', *vaka-putu-hi-* 'break by stepping on', *vaka-mate-hi-* 'kill by stepping on'."

In favour of a similar analysis for the Vitu example (7) is the fact that *hara* is clearly a bound morpheme, never occurring on its own. The full verb *hara-ti* 'to bite' must have the transitive suffix *-Ci*. This is true for only a small subgroup of class 3 transitive verbs in Vitu. Most class 3 verbs without *-Ci* function intransitively or semi-transitively. *Hara-ti* also needs a following object suffix/enclitic (such as *-au* '1SG' or *-a* '3SG'), as illustrated in (9).

(9) *Kaua e   hara-ti-au.*
    dog   R:3 bite-TR-1SG
    'A dog bit me.'

However, there are two reasons that argue against the prefix analysis.

In the first place, there are dozens of verbs that can function as 'prefixes'. Some further examples of these 'prefixes' that can occur are given in (10). In each case the construction will be given with its constituent parts. (Citation forms for transitive verbs are again given with the 3SG object suffix -*a*, which is henceforth not translated).

(10)	*dae-mai-ni-a*	'pull this way'	*dae-a*	'pull'
			mai	'come, this way'
	hada-pati-a	'stare at'	*hada*	'see'
			pati	'float, stand still'
	hutu-vala-hi-a	'break open'	*hutu-zi-a*	'hit'
			vala-hi-a	'break'
	lohoi-pari-a	'remember'	*lohoi-a*	'think'
			pari-a	'find'
	toro-lobi-a	'swarm around'	*toro-ni-a*	'swarm'
			lobi-a	'surround'

Having such a large number of prefixes, all identical to independent verbs, seems to point away from a prefix analysis. A more economical analysis is to treat these constructions as verbal compounds or serial verb constructions.

A second argument against the prefix analysis is that the second element in these constructions is not always a verb, but can also be an adverb or an adjective. If the first element was truly a prefix, its ability to attach to verbs, as well as to adjectives and adverbs would be highly unusual. Adverbs as second elements are shown in (11), adjectives in (12).

(11)	*taru-langa-ri-a*	'put up'	*taru-hi-a*	'put'
			langa	'up, above'
	taru-tadu-ri-a	'put down'	*taru-hi-a*	'put'
			tadu	'down'
	taru-mule-hi-a	'put back'	*taru-hi-a*	'put'
			mule	'again, back'
(12)	*hani-mata-hi-a*	'eat raw'	*hani-a*	'eat'
			mata	'raw'
	kati-vutu-hi-a	'make properly'	*kati-a*	'make, do'
			vutu	'proper'
	kati-kemi-hi-a	'fix, repair; bless'	*kati-a*	'make, do'
			kemi	'good'

For these two reasons – descriptive economy and categorial diversity of the second root – the prefix solution is to be abandoned.

5. Compound verbs

The following five criteria are the defining characteristics of compound verbs in Vitu.

- The verbal compound, as illustrated in (7), (8), and (10) - (12), forms only one stress and intonation unit which cannot be broken up by a pause. In other words, a verbal compound is one phonological word. In serial verb constructions, on the other hand, both verbs take stress and a slight pause is possible between the two verbs. This is the reason compounds are written as hyphenated words in this paper.

- Compound verbs are new lexical items. The transitivising suffix -*Ci* is sometimes unique to the compound, since neither element takes this particular allomorph. Compare *hara-mate-hi-a* 'bite to death' with *hara-ti-a* 'bite' and *mate* 'die'. The 'new' thematic consonant *h* for the compound clearly shows the derivational nature of the process. (Note that the form *mate-hi-a* does not occur by itself as a main transitive verb, but is only found in compounds.) As will be shown below, this is in contrast with verb serialisation, where no new lexical item is created.

- The first part of the compound is often a bound form of the verb (*hara-, hubi-, dae-*), which usually does not occur by itself, needing the object suffixes/enclitics and often also the transitiviser -*Ci*. In serial verb constructions, on the other hand, one only finds the juxtaposition of independent verbs, e.g. *rovo* 'run', *ziho* 'go down'.

- Transitive compound verbs can also be passivised, showing that the new lexical item can be the basis for further derivations.

(13) *pade-mate-hi-a*   'to spear to death'   *pado-matoa*   'to be speared to death'

   taru-langa-ri-a 'to put up'   *taru-langa-ra*   'to be put up'

   lohoi-pari-a   'to remember'   *lohoi-parua*   'to be remembered'

- The meaning of the compound verb is not always predictable from the meaning of the component parts. In other words, some lexicalisation has taken place. Examples:

(14) *lohoi-pari-a*   'remember'   *lohoi-a*   'think'
                                         pari-a   'find'

   taza-puli-a   'wear a garment tied   *taza*   'tie'
                     above the breasts'   *puli*   'tight'

   vati-tapu-ni-a 'leave behind'   *vati-a*   'leave'
                                           tapu-ni-a 'throw'

In terms of productivity, Vitu is surprising. Generally, compounds tend to show limited productivity, and verbal compounds are possibly even less productive than nominal compounds (at least in many European languages). This, however, is not borne out in Vitu. A productivity check was done with a number of native speakers to test the acceptability of possible compounds on the basis of three transitive verbs as the first element: *hara-* 'bite', *hubi-* 'hit' and *taru-* 'put'. The second element was either a transitive verb (e.g. *hutu-* 'break'), an intransitive verb (*mai* 'come, this way'), an adjective (*kemi* 'good') or an

adverb (*mule* 'again').

As can be seen in (15), fourteen potential compounds with *hara-* were deemed acceptable, two were judged questionable (they could be given a meaning, but are not likely to crop up in spontaneous speech), while four were considered ungrammatical.

(15) *hara-hutu-zi-a*   bite-break   'break (a rope) by biting'
      hara-kemi-hi-a   bite-good   'bite well, bite properly'
      hara-lobi-a   bite-surround   'bite around'
      hara-marata-ni-a   bite-so   'bite so much'
      hara-mate-hi-a   bite-die   'bite to death, kill by biting'
      hara-mule-hi-a   bite-again   'bite again'
      hara-pari-a   bite-find   'find by biting'
      hara-tadu-ri-a   bite-down   'bite down, clamp down'
      hara-tapu-ni-a   bite-throw   'bite quickly'
      hara-tere-hi-a   bite-tear   'tear by biting'
      hara-vala-hi-a   bite-break   'break by biting'
      hara-veta-ni-a   bite-in.vain   'bite for no reason'
      hara-vutu-hi-a   bite-proper   'bite properly'
      hara-zaha-ti-a   bite-bad   'bite badly, bite in the wrong way'

      ?hara-hozo-vi-a   bite-finish   'finish by biting'
      ?hara-lala   bite-know   'know by biting'

      *hara-langa-ri-a   bite-up
      *hara-mata-hi-a   bite-raw
      *hara-mai-ni-a   bite-come
      *hara-vano-ni-a   bite-go

With *hubi* 'hit', the numbers are roughly the same, as shown in (16): eighteen are fine, and only two are ungrammatical, as no meaning could be attached to the resulting compound.

(16) *hubi-hozo-vi-a*   hit-finish   'kill all, hit completely'
      hubi-hutu-zi-a   hit-break   'break (a rope) by hitting'
      hubi-kemi-hi-a   hit-good   'hit well, hit properly'
      hubi-langa-ri-a   hit-up   'hit upwards'
      hubi-lobi-a   hit-surround   'hit around'
      hubi-mai-ni-a   hit-come   'hit (it) this way'
      hubi-marata-ni-a   hit-too.much   'hit too much, hit severely'
      hubi-mate-hi-a   hit-die   'hit to death, kill by biting'
      hubi-mule-hi-a   hit-again   'hit again'
      hubi-pari-a   hit-find   'find out by hitting'
      hubi-tadu-ri-a   hit-down   'hit down'
      hubi-tapu-ni-a   hit-throw   'hit quickly'
      hubi-tere-hi-a   hit-tear   'tear by hitting'
      hubi-vala-hi-a   hit-break   'break by hitting'
      hubi-vano-ni-a   hit-go   'hit (it) that way'
      hubi-veta-ni-a   hit-in.vain   'hit for no reason'
      hubi-vutu-hi-a   hit-proper   'hit properly'
      hubi-zaha-ti-a   hit-bad   'hit badly, hit not properly'

*hubi-lala	hit-know
*hubi-mata-hi-a	hit-raw

With *taru* 'put', the numbers are again almost the same: seventeen are fine, and only three are not acceptable.

(17)	*taru-hozo-vi-a*	put-finish	'put everything'
	taru-kemi-hi-a	put-good	'put it well, put it properly'
	taru-langa-ri-a	put-up	'put it in a high position'
	taru-lobi-a	put-surround	'put it around something'
	taru-mai-ni-a	put-come	'put it this way'
	taru-marata-ni-a	put-too.much	'put too much of it'
	taru-mata-hi-a	put-raw	'put it raw (in a heap)'
	taru-mule-hi-a	put-again	'put it again, put it back'
	taru-pari-a	put-find	'discover, find out by accident'
	taru-tadu-ri-a	put-down	'put it down'
	taru-tapu-ni-a	put-throw	'put it quickly/carelessly'
	taru-tere-hi-a	put-tear	'tear it by putting something on it'
	taru-vala-hi-a	put-break	'break it by putting it somewhere'
	taru-vano-ni-a	put-go	'put it that way'
	taru-veta-ni-a	put-in vain	'put it for no reason, carelessly'
	taru-vutu-hi-a	put-proper	'put it away properly'
	taru-zaha-ti-a	put-bad	'put it wrongly'
	*taru-lala	put-know	
	*taru-hutu-zi-a	put-break	
	*taru-mate-hi-a	put-die	

In conclusion, verbal compounding with a transitive verb as the first element appears to be very productive. Unacceptable cases were limited to compounds for which no appropriate situation could be envisioned. It is possible, however, that very creative native speakers could come up with scenarios where even a compound such as *hubi-lala* 'hit know' can be assigned a meaning, e.g. a blind man finding out about the identity of objects or people by hitting them with a stick. This remains to be confirmed. But it is clear that lack of productivity is not a criterion that can be invoked to decide between compounds and SVCs.

Most of the verbal compounds illustrated so far have an initial element which is typically a bound form (*hara-*, *hubi-* and *taru-*), and a second element which typically has a transitivising suffix *-Ci*. However, there are also a few verbal compounds where both components can stand on their own and there are no transitivity markers. These are illustrated in (18):

(18)	*hada-lala*	see-know	'recognise (by seeing)'	(tr)
	longo-lala	hear-know	'recognise (by hearing)'	(tr)
	hada-poto	look-hold	'look after'	(intr)

These constructions agree with four of the criteria listed for compounds at the beginning of this section: no pause is possible between the elements, they constitute a new lexical item, the transitive verbs can be passivised (e.g. *hada-lala-nga* 'to be recognised'), and the meaning is somewhat lexicalised. But they fail on the test of having bound elements. I will therefore call these compounds 'loose compounds', as against the large number of regular or 'tight' compounds illustrated above. A clausal example of the loose compound hada-poto is (19):

(19)   .... *ki*   <u>*hada-poto*</u>   *na*   *ka-na*   *lubaluba katiu.*
         CONT:3   see-hold   LOC   PC-3SG   eel   one
         '…and he looked after his one eel.'

6. Serial verb constructions

6.1 Defining SVCs in Vitu

Based on the literature on SVCs cited earlier, the following criteria can be listed as the prototypical defining features of a SVC in Vitu:

- a sequence of two or more verbs acting as a single predicate, as shown by the absence of an AMS marker (aspect-mood-sequentiality) before the second (and third) verb;
- each component verb can occur on its own;
- the verbs share one or more arguments;
- the sequence describes what is conceptualised as a single event.

The most critical criterion for an SVC in Vitu is the absence of an AMS marker before the second verb. Compare the following contrasting examples of a SVC in (20a), and a biclausal construction in (20b).

(20)   a.   *Hiro ta* <u>*vazula   lohu*</u>.
              3DU R   paddle   arrive
              'They arrived paddling.' (Lit: 'They paddled (and) arrived.')

        b.   *Hiro ta* <u>*vazula*</u>   *hiro   ka*   <u>*lohu.*</u>
              3DU R   paddle   3DU   CONT   arrive
              'They paddled and (then) they arrived.'

In cognitive terms, the SVC in (20a) presents one event, profiling the arrival and treating the paddling as the base. Only a punctual time phrase can modify the whole clause, e.g. 'in the late afternoon'. The coordinated clause in example (20b), on the other hand, presents two separate events and hence the first clause can be modified by a durative temporal phrase, e.g. 'for two hours'. This modification is impossible for (20a).

It appears that SVCs in Vitu are mainly asymmetrical: the first verb is typically from

a large, open class, while the second verb is taken from a more restricted set. However, the exact number and types of verbs that can occupy these two positions remain to be investigated.

The next two subsections discuss and illustrate the two major subtypes that exist within SVCs: same-subject serialisation (§6.2) and switch-subject serialisation (§6.3).

6.2 Same-subject serialisation

Within same-subject serialisation, the two verbs are contiguous and share the same subject, which has to be present before the first verb in the form of an AMS-marker, optionally preceded by a full NP or a free pronoun. (The exceptions are imperatives and 3SG realis; in both cases the AMS can be absent).

Two subtypes of same-subject serialisation can be distinguished. In the first subtype there are two intransitive verbs sharing the same subject. The second verb is taken from a small set of motion verbs, e.g. *bele* 'arrive', *mai* 'come', *vano* 'go', *zahe* 'go up; move away from land (when at sea)', *ziho* 'go down; move towards the land (when at sea)'. Notice that all verbs can occur on their own, receive their own stress and can potentially be separated by a short pause.

(21) *Ia <u>vano bele</u>   na   ruma.*
       3S go   arrive LOC house
       'He went and arrived at the house.'

(22) *Pale, hadora ia <u>raga zahe</u>   kara hud-a   hai.*
       so   cuscus 3SG jump go.up to   top-3SG   tree
       'So the cuscus jumped up into the tree.'

The motion verbs *mai* 'come' and *vano* 'go' have developed more specific meanings in SVCs:

- *mai* indicates a so-called 'venitive' movement towards the speaker (or deictic reference point);
- *vano* indicates an 'allative' movement away from the speaker (or deictic reference point);
- *vano* can also have the aspectual meaning of continuous or durative action.

The 'movement' that these verbs modify can be a literal movement, but it can also be applied to verbs of perception and certain action verbs. Compare the following illustrative examples:

(23) a. _Rovo_   _mai_!
          run   come
          'Run here! Run to me! Run this way!'

      b. _Rovo_   _vano_!
          run   go
          'Run away! Run over there!'

(24) a. _Tunga_   _mai_!
          look   come
          'Look here! Look this way!'

      b. _Tunga_   _vano_!
          look   go
          'Look away! Look over there!'

(25) _Dia ta ngiti_   _mai_.
      3PL R show.teeth   come
      'They are smiling at us / towards us.'

(26) _A   sikau   e   pati   vano_.
      ART wallaby R:3 float go
      a. 'The wallaby floated away.'
      b. 'The wallaby continued to float.'

The number of verbs in a SVC can also be three, at least one of which has to be a motion verb:

(27) _Hiro ta rovo zahe   bele_.
      3DU R run   go.up arrive
      'They ran up and arrived.'

(28) _Pale, miro   kene vazula hamule ziho_   _kara   vazalea_.
      so   1DU.EX SEQ paddle return go.down to   beach
      'So then the two of us paddled back to shore.'

The second type of same-subject serialisation consists of an intransitive motion verb, followed by a transitive verb. Again, the two verbs are contiguous and share the same subject:

(29) _Ia   dati   rovo   hani-a_.
      3SG FUT:3 run   eat-3SG
      'It (= the fish) will quickly eat it.'

(30) _Ho zahe   papane paido_!
      2SG go.up   climb   coconut
      'Go up and climb a coconut tree!'

6.3 Switch-subject serialisation

In switch-subject serialisation, the first verb is transitive, followed by an object, which is in turn followed by an intransitive verb, frequently a motion verb. The object of the transitive

verb and the subject of the following intransitive verb are co-referential. Notice that the verbs are not contiguous, and hence 'violate' one of the basic defining criteria of SVCs. The critical point is still the absence of an AMS marker before the second verb, clearly indicating that the two verbs constitute a single predicate, and conceptualise a single event. The 'intervening' object can be a full NP, as in (31) - (33), or an object enclitic/suffix, as in (34) and (35).

(31) *Ia* *vati-a*   *kaua*   *dua.*
     3SG   leave-3SG dog   fall
     'He dropped the dog.' (Lit. 'He left/loosened the dog [and it] fell.')

(32) *Dia ta* *vile-vile*   *hani-nga*   *lohu.*
     3PL R collect-RED eat-NMLZ   arrive
     'They all brought food.' (Lit. 'They all collected food [and it] arrived.')

(33) *Hita*   *ta* *hare-hi-a*   *bot* *vori.*
     1PL.EX R   pull-TR-3SG boat go.inland
     'We dragged the boat up the shore.' (Lit. 'We dragged the boat [and it] went
     inland.')

(34) *...mo* *ta* *pele-hiro* *mai*   *ni*   *niau.*
       2DUR   take-3DU   come   LOC   1SG.OBL
     '…you two must bring both of them to me.' (Lit. '… you-two take them-two [and
     they-two] come to me.')

(35) *Ta* *havi-li-a*   *zahe.*
     R   catch-TR-3SG go.up
     'I pulled it (= the fish) up.' (Lit. 'I caught it [and it] went up.')

6.4 Quasi-SVCs

We end our discussion of SVCs with cases where an AMS marker is present before the second verb, but where the second clause does not indicate a separate event. In (36), for example, the second verb (a motion verb) is preceded by the continuity marker *ki* and therefore fails to qualify as a SVC.

(36) *Ia zungi-a*   *na* *bavuk-a* *haroho* *e* *pe*   *na*
     3SG smell-3SG   ART smell-3SG fire   R:3 come/go LOC

     potuna   *ki*   *ziho.*
     mountain   CONT:3 go.down
     'He smelled the smell of fire which came down from the mountain.' (Lit. '…it
     came/went from the mountain and it went down.')

However, (36) describes the single event of the smoke coming down, presented in two clauses. Such a construction could be termed a 'quasi-SVC', as it is obviously not a typical example of a SVC. There are not many examples of this phenomenon in our corpus.

A similar construction is present in Tok Pisin. In his grammar of Tok Pisin, Verhaar

(1995) discusses these under the title 'serial complex predicates with *na*' and gives various examples, including *Yu stap we na yu kam?* 'Where have you been?' (Literally: 'Where were you and you came?') In spite of the coordinating conjunction *na* 'and', Verhaar says that this is "one single question consisting of two serialised predicates." (1995:121)

Another quasi-SVC is the habitual construction with the verb *lala*, followed by the purpose AMS marker *kata* (or *koto ~ kutu* for 2SG, and *kete ~ kiti* for 3SG). The verb *lala* normally means 'to know', but in this particular combination it has the aspectual meaning 'habitually, normally, used to' (comparable to the double meaning of Tok Pisin *save*). Notice that in the following examples the two verbs each have an AMS marker, but that these biclausal constructions describe a single event.

(37) *Manu kua nazia e   lala kete   hani-a?*
      bird   this what R:3 HAB PURP:3 eat-3SG
      'What does this bird normally eat?'

(38) *Tu lala koto   ma-mama?*
      R:2 HAB PURP:2 RED-chew.betelnut
      'Do you chew betelnut (as a habit)?'

(39) *Ta lala kata mi-mia kama-miu na   dama laveve.*
      R   HAB PURP RED-sit with-2PL LOC day   all
      'I used to sit with you every day.'

We end this section by giving two unambiguous examples of coordination. These have two distinct AMS markers and clearly describe two events.

(40) *Dia ta geri-a   kaka   katiu ki   vano.*
      3PL R send-3SG person one   CONT:3 go
      'They sent somebody and he went.'

(41) *A   Hahara e   kove   ki   ma   mia na   malala.*
      ART H.   R:3 pregnant CONT:3 PROG sit LOC village
      'Hahara was/became pregnant and remained in the village.'

7. Conclusion

Table 3 presents the results of the analysis, showing the scalar nature of verb-verb combinations in Vitu, ranging from tight compounds to quasi-SVCs. Simple coordination has been added for purposes of contrast. The second column in table 3 gives the example numbers which illustrate the various types.

Table 3. The scalar nature of compounds and SVCs in Vitu

type	examples	pause possible	separate AMS marker	bound forms	single stress	verbs contiguous	semantic unit
tight compound	7, 8, 10-17	no	no	yes	yes	yes	yes
loose compound	5, 18, 19	no	no	no	yes	yes	yes
same-subject SVC	4, 20a, 21-30	yes	no	no	no	yes	yes
switch-subject SVC	6, 31-35	yes	no	no	no	no	yes
quasi-SVC	36-39	yes	yes	no	no	no	yes
coordination	20b, 40, 41	yes	yes	no	no	no	no

There are two outstanding issues which require more research. The first is that additional criteria can probably be added to expand and refine the scale. Candidates for such criteria are polarity, passivisation, nominalisation, and a more robust analysis of what constitutes a 'single event'.

The second issue is the relationship between transitivity on the one hand and SVCs and compouding on the other. In tight compounds the first verb is normally transitive (though there may be exceptions), while in same-subject SVCs the first verb is always intransitive. This looks like complementary distribution and the implications of this distribution need closer scrutiny than this paper has been able to provide.

(Endnotes)

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2. Abbreviations used for interlinear glosses: art: article; caus: causative; cont: continuity; du: dual; ex: exclusive; fut = future; loc = locative; nmlz: nominaliser; obl: oblique; pc = possessive classifier; pl: plural, prog = progressive; r: realis; red = reduplication; seq: sequentiality; sg: singular; tr: transitiviser.

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