

VERB SEQUENCES IN MOI¹

Raymond H. Menick
Leiden University/ISIR

Moi is spoken in the west Bird's Head of Irian Jaya, Indonesia. It has been classified as a member of the West Papuan Phylum (Voorhoeve 1975). In Moi, verb sequences are encountered, which resemble some of the types of serial verb constructions, that are distinguished by Crowley (1987) and Givón (1991). Five types of verb sequences in Moi (same-subject; switch-subject; verb co-lexicalization; deictic-directional marking; and aspect marking) are subjected to syntactic tests, in order to determine whether they qualify as serial verb constructions or as coordinate constructions. Scope of negation, and aspect indicator, insertion of a conjunction, and reversibility yield conflicting results.

1 Introduction

Moi is a Papuan language spoken by approximately 4,000 people (Grimes [1992]:578) in the *kecamatan*s (subdistricts) Salawati, Sorong, and Makbon of the *kabupaten* (regency) Sorong in the west Bird's Head of Irian Jaya, Indonesia (Silzer and Heikkinen 1991:64). Moi has been classified as a member of the West Bird's Head Family, which is part of the West Bird's Head Stock in the West Papuan Phylum (Voorhoeve 1975:717-19).

In Moi juxtaposition of verbs occurs very frequently. Juxtaposition of verbs is widely accepted as one of the parameters to characterize serial verb constructions (SVCs). According to Foley and Olson ([1985]:18): SVCs "are constructions in which verbs sharing a common actor or object are merely juxtaposed [...]", and Hamel (1993:111): "Two or more verbs or VP's are juxtaposed with no intervening coordinator or subordinator, and no indicator of an intervening clause boundary, whether morphological or intonational." Foley demonstrates that SVCs are a common phenomenon in many Papuan languages ([1986]:113-17).

From the literature on SVCs it becomes obvious that there is little agreement as to how the phenomenon of serial verbs is to be defined (for definitions see, e.g. Lord 1973:269; Foley and Olson [1985]:18-32; Sebba 1987:39; Givón 1991:140; Hamel 1993:111-12; Bradshaw 1993:144-45; and Comrie 1995:25-6). However, there seems to be some consensus on certain aspects of this phenomenon. As Comrie (1995:25) states it: "While there is considerable controversy concerning the precise characterization of the serial verb construction the following criteria are among those that are most frequently and consistently cited, thus approaching a consensus:

- (a) The sequence of verbs in a serial verb construction occurs within a single clause,

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- i.e. with no clause boundaries intervening between members of the serial verb construction;
- (b) Either there is no marking of most verb categories (person-number, tense-aspect-mood, polarity, etc.) except on the main verb, or all verbs except the main verb must have the same category value as the main verb;
 - (c) The verbs in the serial verb construction are interpreted as expressing a single event."

It is the aim of this paper to examine verb sequences in Moi. Through the application of syntactic tests, this investigation tries to establish whether verb sequences in Moi qualify as SVCs or as coordinate constructions. In the analysis presented below only syntactic tests have been used, because the notions of 'clause' and 'single event' (as mentioned in Comrie's criteria (a) and (c)) are problematic. Definitions of these notions are subject to circularity, as Givón (1991:140) points out: "On the structural side, single clause is a notion that retains a high potential for circularity. One can easily define **clause** as *a construction with a single verb at its core*. On the cognitive side, **single event** is just as susceptible to the very same circular definition, and linguists are notoriously prone to letting grammatical structure define what is a 'single event'."

The following syntactic tests are applied: (i) possible insertion of the verb *pana* ('it goes'), acting as a coordinator, between two sequenced verbs; (ii) the scope of the negator *dau*; (iii) the scope of the aspect indicator *-ein* (a verb meaning 'to finish'; and (iv) reversability of the order of the sequenced verbs. If the verb sequences do not behave like a syntactic unit, i.e. are separable, they are considered as multi-clausal constructions and not as SVCs.

In section 2 some structural characteristics of the Moi language that are relevant for this exercise, will be given. In section 3 types of verb sequences that occur in Moi are presented, immediately followed by the application of the syntactic tests. Finally, in section 4 some conclusions with regard to verb sequences in Moi are given.

2 Some characteristics of Moi

The unmarked structure of a declarative clause is subject-verb-object. Verbs are obligatorily inflected for person and number. A pronominal prefix is added to the verb stem cross-referencing the subject. This is illustrated in (1).

- (1)a. *ne-dala* *we-ben* *ne-laagi*
 person-man 3s:M-hit person-woman
 'A man hit a woman'
- b. *ne-laagi* *me-ben* *ne-dala*
 person-woman 3s:F-hit person-man
 'A woman hit a man'
- c. *te-ben* *miye-kiyem*
 1s-hit child-little'
 'I hit a child'

Standard negation is expressed through the negator *dau*. It immediately follows the constituent that is negated. In (2a) *dau* can be positioned directly following *ne Moi* (2b), or the predicate *y-EEK* (2c), or *yawa k-ow* (2d).

- (2)a. *ne Moi y-EEK yawa k-ow*
 person M. 3p:H-know sago.tree NEAR-DEM
 'Moi people knew this sago-tree'
- b. *ne Moi dau y-EEK yawa k-ow*
 person M. not 3p:H-know sago.tree NEAR-DEM
 'Not the Moi people knew this sago-tree'
- c. *ne Moi y-EEK dau yawa k-ow*
 person M. 3p:H-know not sago.tree NEAR-DEM
 'Moi people did not know this sago-tree'
- d. *ne Moi y-EEK yawa k-ow dau*
 person M. 3p:H-know sago.tree NEAR-DEM not
 'Moi people knew not this sago-tree'

Aspect may be expressed through the verb *-ein* 'to finish'. This aspect indicator follows a verb phrase, as in (3).

- (3) *ya-sak Kalasowo aali-ow p-ein y-umu*
 3p:H-cross K. below-DEM 3s:NH-finish 3p:H-leave:p
 'After they had crossed the Kalasowo river, they left'
 (lit.: 'they crossed the Kalasowo river down there, it was finished, they left')

In Moi, no lexical category of prepositions exists. Prepositional notions are expressed through verbs. Directionals are expressed through *-osu* 'to' and *-ein* 'from'. In the locatives a distinction is made between horizontal (H) and non-horizontal (NH), each differentiating between singular and plural: *-a(w)i* (NH,s) and *-e(w)i* (NH,p); *-au* (H,s) and *-uu* (H,p).

3 Possible SVCs in Moi

In the literature on SVCs a distinction is made between different types of SVCs. Crowley (1987:38-40) categorizes serial verbs into four types (partly derived from Foley and Olson ([1985]) and Durie (1982)), based on the nature of relationships that hold between the nominal arguments associated with each of the verbs in question: (i) same-subject serialization: there is identity between the two subjects of the serialized verbs; (ii) switch-subject serial verbs or serial causative verbs: there is identity not between the two subjects, but between the object of the first verb and the subject of the following verb; (iii) multiple object serialization: complex verb phrases with multiple objects; and (iv) ambient serialization: neither the subject of the first verb, nor the object of the first verb is marked on the second verb. The second verb refers to a general act, not to particular participants.

Givón (1991:138-39) divides SVCs into five "more or less distinct types": (i) case-role marking: different serial verbs are used as grammaticalized markers of nominal case-roles; (ii) verb co-lexicalization: two or more verb stems are co-lexicalized to create a more complex verbal concept; (iii) deictic-directional marking: verbs with deictic values are grammaticalized to impart those deictic values to other motion or transfer verbs; (iv) tense-aspect marking: aspectual or modal functions are marked by serial verbs; and (v) evidentiality and epistemic marking: verbs such as 'think', 'say', 'hear' or 'know' become evidential markers.

In Moi, verb sequences are encountered which resemble the following types of SVCs: (i) same-subject serialization; (ii) switch-subject serial verbs/serial causative verbs; (iii) verb co-lexicalization; (iv) deictic-directional marking; and (v) tense-aspect marking. These five types of verb sequences will be tested below.

3.1 Sequences of verbs in which there is identity between the two subjects of the sequenced verbs

An example of this type is given in (4).

- (4) *m-ii* *m-eesen*
 3s:F-cry 3s:F-jump
 'She cried, she jumped'

In (4) insertion of the coordinator *pana*, the negator *dau*, and the aspectual indicator *-ein* is possible. In (5a) two actions are conjoined by *pana*, which makes it explicit that the actions described by the two verbs are performed consecutively. A different position of the negator causes a difference in scope of the negation, as in (5b-c). The presence of an aspectual indicator explicitly indicates two consecutive actions, as in (5d-e). Absence of an aspectual indicator, as in (4), indicates that the two actions are executed simultaneously or consecutively, depending on the context.

- (5)a. *m-ii* *p-ana* *m-eesen*
 3s:F-cry 3s:NH-go 3s:F-jump
 'She cried, then, she jumped'
- b. *m-ii* *dau,* *m-eesen*
 3s:F not 3s:F-jump
 'She didn't cry, she jumped'
- c. *m-ii,* *m-eesen* *dau*
 3s:F-cry 3s:F-jump not
 'She cried, she didn't jump'
- d. *m-ii* *p-ein* *m-eesen*
 3s:F-cry 3s:NH-finish 3s:F-jump
 'After she had cried, she jumped'
 (lit.: 'She cried, it (=crying) was finished, she jumped')

- e. *m-ii* *m-eesen* *p-ein* (*ma-lan*)
 3s:F-cry 3s:F-jump 3s:NH-finish (3s:F-run.away)
 'She cried, after she had jumped (she ran away)'
 (lit.: She cried, she jumped, it (=jumping) was finished', (she ran away))

The order of the two verbs can be reversed, as in (6).

- (6) *m-eesen* *m-ii*
 3s:F-jump 3s:F-cry
 'She jumped, she cried'

Another same-subject verb sequence involves a "prepositional verb" as second member. Examples with directional verbs are given in (7a-b) and with a locative verb in (7c).

- (7)a. *ara* *n-esin* *n-oolok* *n-osu* *aali*
 breadfruit.tree 3p:NH-fruit 3p:NH-fall 3p:NH-to below
 'Fruits of the breadfruit tree fell down'
- b. *m-ibili* *m-ein* *taasik* *aali-ow*
 3s:F-emerge 3s:F-from sea below-DEM
 'She came up from the sea down there'
- c. *dimem* *mo-tolo* *m-ai* *wilinsa-keik-laagi* *ow*
 mother 3s:F-wait 3s:F-at:s ladder-house-woman DEM
 'The mother waited at the ladder of the women's part of the house'

In the sentences in (7) the coordinator *pana* cannot be inserted between the first verb and the "prepositional verb". The constructions in (8) are ungrammatical.

- (8)a. **ara* *n-esin* *n-oolok* *p-ana* *n-osu* *aali*
 breadfruit.tree 3p:NH-fruit 3s:NH-fall 3s:NH-go 3p:NH-to below
- b. **m-ibili* *p-ana* *m-ein* *taasik* *aali-ow*
 3s:F-emerge 3s:NH-go 3s:F-from sea below-DEM
- c. **dimem* *mo-tolo* *p-ana* *m-ai* *wilinsa-keik-laagi* *ow*
 mother 3s:F-wait 3s:NH-go 3s:F-at ladder-house-woman DEM

When the position of the negator *dau* is manipulated in the sentences of (7), the scope of the negation varies. This is illustrated in (9) for (7a).

- (9)a. *ara* *n-esin* *n-oolok* *dau* *n-osu* *aali*
 breadfruit.tree 3p:NH-fruit 3p:NH-fall NEG 3p:NH-to below
 'The fruits of the breadfruit tree did not fall down'

- b. *ara* *n-esin* *n-oolok* *n-osu* *aali* *dau*
 breadfruit.tree 3p:NH-fruit 3p:NH-fall 3p:NH-to below NEG
 'The fruits of the breadfruit tree fell, they did not go (all the way) down'

In (9a) the focus of the negation is on "falling"; this sentence may be continued in the way as presented in (10a). In (9b) the fruits of the breadfruit tree fell, but did not reach a spot lower than the position of the speaker. In case the fruits had not fallen, a sentence like (10b) would be an appropriate utterance to describe the situation.

- (10)a. *ara* *n-esin* *n-oolok* *dau* *n-osu* *aali* *mainkaiso*
 breadfruit.tree 3p:NH-fruit 3p:NH-fall NEG 3p:NH-to below but

ni-lilik *n-osu* *aali*
 3p:NH-roll 3p:NH-to below

'The fruits of the breadfruit-tree did not fall down, but they rolled down'

- (10)b. *ara* *n-esin* *n-oolok* *dau*
 breadfruit.tree 3p:NH-fruit 3p:NH-fall NEG
 'The fruits of the breadfruit-tree did not fall'

When the aspect indicator *-ein* is added to the sentences in (7), as is presented in (11), the first verb and the "prepositional verb", fall within its scope.

- (11)a. *ara* *n-esin* *n-oolok* *n-osu* *aali* *p-ein*
 breadfruit.tree 3p:NH-fruit 3p:NH-fall 3p:NH-to below 3s:NH-finish
 'After the fruits of the breadfruit-trees had fallen down'

- b. *m-ibili* *m-ein* *taasik* *aali-ow* *p-ein*
 3s:F-emerge 3s:F-from sea below-DEM 3s:NH-finish
 'After she had come up from the sea down there'

- c. *dimem* *mo-tolo* *m-ai* *wilinsa-keik-laagi* *ow* *p-ein*
 mother 3s:F-wait 3s:F-at ladder-house-woman DEM 3s:NH-finish
 'After mother had waited at the ladder of the women's part of the house'

When the aspect indicator *-ein* is placed directly following the first verb, as in (12), native speakers' reactions regarding the constructions with the directional "prepositional verbs", (12a-b), are not conclusive. The construction with the locative "prepositional verb" (12c) is rejected outright.

- (12)a. ?*ara* *n-esin* *n-oolok* *p-ein* *n-osu* *aali*
 breadfruit.tree 3p:NH-fruit 3p:NH-fall 3s:NH-finish 3p:NH-to below
 ?'After the fruits of the breadfruit-trees had fallen, they went down'

- b. ?*m-ibili* *p-ein* *m-ein* *taasik* *aali-ow*
 3s:F-emerge 3s:NH-finish 3s:F-from sea below-DEM
 ?'After she had already come up, she (came) from the sea down there'

- c. **dimem mo-tolo* *p-ein* *m-ai* *wilinsa-keik-laagi* *ow*
 mother 3s:F-wait 3s:NH-finish 3s:F-at ladder-house-woman DEM

Reversion of the order of the verb phrases in the sentences of (7) yields ungrammatical constructions (13).

- (13)a. **ara* *n-esin* *n-osu* *aali* *n-oolok*
 breadfruit.tree 3p:NH-fruit 3p:NH-to below 3p:NH-fall
- b. **m-ein* *taasik* *aali-ow* *m-ibili*
 3s:F-from sea below-DEM 3s:F-emerge
- c. **m-ai* *wilinsa-keik-laagi* *ow* *dimem mo-tolo*
 3s:F-at ladder-house-woman DEM mother 3s:F-wait

3.2 Sequences of verbs in which there is identity between the object of the first verb and the subject of the second verb.

Examples of this type are presented in (14). The first verb, of course, is always a transitive verb and the second verb is a "prepositional verb".

- (14)a. *wi-sik* *p-osu* *wi-gik* *p-ana* *lun*
 3s:M-take 3s:NH-to 3s:M-mouth 3s:NH-go inside
 'He put it into his mouth'
 (lit.: He took, it to his mouth, it went inside)
- b. *wi-sik* *p-ein* *dafele* *laan-ow*
 3s:M-take 3s:NH-from raft above-DEM
 'He took it from the raft up there'
- c. *n-auk* *p-au* *kamsaser*
 2s-place 3s:NH-at:s' place.mat
 'You put it on a place mat'
- d. *m-uluk* *n-uu* *ana-ow*
 3s:F-put.down 3p:NH-at:p there-DEM
 'He put them down there'

It is clear that the constructions in (14) all involve a zero object, cross-referenced by *p-* '3s:NH' or *n-* '3p:NH'. A nominal constituent may occur between the first verb and the second verb, being the object of the first verb and the subject of the second verb. The prefix of the second verb cross-references the object of the first verb. This is illustrated for (14a and d) in (15).

- (15)a. *wi-sik* *oo* *p-osu* *wi-gik* *p-ana* *lun*
 3s:M-take banana 3s:NH-to 3s:M-mouth 3s:NH-go inside
 'He put a banana into his mouth'

- b. *m-uluk kawak en n-uu ana-ow*
 3s:F-put.down stone DEM 3p:NH-at:p there-DEM
 'She put the stones down there'

In constructions with the directional "prepositional verbs" insertion of the coordinator *pana* is possible, as is illustrated in (16a-b). But in constructions with the locative prepositional verbs insertion of the coordinator *pana* is not possible, (16c-d).

- (16)a. *wi-sik (oo) p-ana p-osu wi-gik p-ana lun*
 3s:M-take (banana) 3s:NH-go 3s:NH-to 3s:M-mouth 3s:NH-go inside
 'He took (a banana), then, it went into his mouth'
- b. *wi-sik (ii) p-ana p-ein dafele laan-ow*
 3s:M-take (sago.bread) 3s:NH-go 3s:NH-from raft above-DEM
 'He took (sago bread), then, it came from the raft up there'
- c. **n-auk (ta-kaasi ow) p-ana p-au kamsaser*
 2s-put (1s-heart DEM) 3s:NH-go 3s:NH-at:s placemat
- d. **m-uluk (kawak en) p-ana n-uu ana-ow*
 3s:F-put.down (stone DEM) 3s:NH-go 3p:NH-at:p there-DEM

Manipulation of the negator *dau* results in a change of scope. This is illustrated in (17) for (14b). Recall that the negation has as its (primary) scope the constituent immediately preceding the negator.

- (17)a. *wi-sik dau p-ein dafele laan-ow*
 3s:M-take NEG 3s:NH-from raft above-DEM
 'He did not take it from the raft up there [but he pulled it]'
- b. *wi-sik p-ein dau dafele laan-ow*
 3s:M-take 3s:NH-from NEG raft above-DEM
 'He took it not from the raft up there [but from another place]'
- c. *wi-sik p-ein dafele laan-ow dau*
 3s:M-take 3s:NH-from raft above-DEM NEG
 'He took it not from the raft up there [but from another raft]'

When the aspect indicator *-ein* is placed after the first verb (phrase), only the construction with the directional "prepositional verb" *-osu* is accepted, (18a). In this case only the first verb falls within the scope of the aspect indicator. The constructions with the other "prepositional verbs" are rejected, (18b-d).

- (18)a. *wi-sik (oo) p-ein p-osu wi-gik*
 3s:M-take (banana) 3s:NH-finish 3s:NH-to 3s:M-mouth

p-ana *lun*
 3s:NH-go inside

'After he had taken (a banana)/it, it went into his mouth'

- b. **wi-sik* (ii) *p-ein* *p-ein* *dafele*
 3s:M-take (sago.bread) 3s:NH-finish 3s:NH-from raft

laan-ow
 above-DEM

- c. **n-auk* (*ta-kaasi* *ow*) *p-ein* *p-au* *kamsaser*
 1s-place (1s-heart DEM) 3s:NH-finish 3s:NH-at:s place.mat

- d. **m-uluk* (*kawak* *en*) *p-ein* *n-uu* *ana-ow*
 3s:F-put.down (stone DEM) 3s:NH-finish 3p:NH-at:p there-DEM

When the aspect indicator is placed after the second verb (phrase), both verbs or verb phrases fall within its scope. This is illustrated for (14b and c) in (19).

- (19)a. *wi-sik* *p-ein* *dafele* *laan-ow* *p-ein*
 3s:M-take 3s:NH-from raft above-DEM 3s:NH-finish
 'After he had taken from the raft up there'

- b. *n-auk* *p-au* *kamsaser* *p-ein*
 2s-place 3s:NH-at:s place.mat 3s:NH-finish
 'After you have put it on a place mat'

The order of the verbs may be reversed, but the meaning of the sentence is radically different. Compare (20) with (14a).

- (20) *p-osu* *wi-gik* *p-ana* *lun* *wi-sik* (*oo*)
 3s:NH-to 3s:M-mouth 3s:NH-go inside 3s:M-take (banana)
 'It (went) into his mouth, he took (a banana)'

3.3 Verb co-lexicalization

Verb stems may be combined to form complex constructions with a single formal marking for subject. It is always the first verb of the sequence that carries the subject prefix. Examples of these constructions are given in (21). The second verb stem may also occur as main verb, as in (22).

- (21)a. *aa-y-umu-faagu* *p-ana* *aali*
 DUAL-3p:H-leave-collect 3s:NH-go below
 'They both left together down there'

- b. *we-wedek-ankar* *wi-nintowo-kidi* *k-en*
 3s:M-squeeze-cheat 3s:M-finger-nail NEAR-DEM
 'He did as if he squeezed his finger nails'
- c. *w-ana-towo* *yak*
 3s:M-go-get fire
 'He went to get fire'
- d. *aa-ya-kamun-ti* *n-ei* *kedenlas*
 DUAL-3p:H-close-cover 3p:NH-with leaf
 'They both covered them with leaves'
- e. *te-feden* *kemaina* *t-amu-san* *nin* *om*
 1s-arrive because 1s-come-get 2s EMP
 'I came because I (wanted) to meet you'
- (22)a. *aa-ya-faagu* *kawak* *n-uu-s* *ow*
 DUAL-3p:NH-collect stone 3p:NH-at:p-PERF DEM
 'They both collected stones there'
- b. *aa-m-oka* *aa-n-ankar* *mam*
 DUAL-1p:EX-assume DUAL-2p-cheat 1p:EX
 'We both thought that the two of you cheated us'
- c. *wo-towo* *n-osu* *wi-bi* *w-ai* *se*
 3s:M-bring 3p:NH-to 3s:M-friend 3s:M-at:s PERF
 'He had already brought them to his friend (he is at)'
- d. *logon* *ni-ti* *p-au* *aali-ow*
 seaweed 3p:NH-cover 3s:NH-at:s below-DEM
 'Seaweed covered it down there'
- e. *aa-ya-san* *miye*
 DUAL-3p:H-get child
 'They both got a child'

In (21) nothing can be inserted between the two verb stems. If an aspect (23) or negation indicator (24) is present, both verb stems fall within the scope of these indicators. The order of the two verb stems is not reversible.

- (23)a. *aa-y-umu-faagu* *p-ana* *aali* *p-ein*
 DUAL-3p:H-leave-collect 3s:NH-go below 3s:NH-finish
 'After they both had already left together down there'

- b. *w-ana-towo yak p-ein*
 3s:M-go-bring fire 3s:NH-finish
 'After he had gone to get fire'
- (24)a. *aa-y-umu-faagu dau p-ana aali*
 DUAL-3p:H-leave-collect NEG 3s:NH-go below
 'They both did not leave together down there'
- b. *w-ana-towo dau yak*
 3s:M-go-bring NEG fire
 'He did not go to get fire'

3.4 Deictic directional marking

This is expressed by the verbs *-ana* (singular)/-*ini* (plural) 'to go' and *-ama* (singular)/-*imi* (plural) 'to come'. Both verbs also occur as main verbs, as in (25).

- (25)a. *ne-dala ow w-ana-s*
 person-man DEM 3s:M-go-PERF
 'That man was already gone'
- b. *w-ama p-ai w-ak yawankerek*
 3s:M-come 3s:NH-for 3s:M-eat k.o.caterpillar
 'He came to eat caterpillars'

Illustrative sentences of verb (phrase) sequences with *-ana/-ini* 'to go' are given in (26a-b) and with *-ama/-imi* 'to come' in (26c-e).

- (26)a. *yawa p-ulu p-ana aali*
 sago.tree 3s:NH-fall.down 3s:NH-go below
 'The sago tree fell down'
- b. *m-oluk duu n-esin n-ini aali*
 3s:F-drop coconut.tree 3p:NH-fruit 3p:NH-go below
 'She dropped the coconuts'
- c. *ne-laagi m-aalim m-ama*
 person-woman 3s:F-go.up 3s:F-come
 'A woman went up in this direction'
- d. *yi-sik kuwok p-ama*
 3s:H-take stringbag 3s:NH-come
 'They took the stringbag here'

- e. *y-ein* *man* *y-imi*
 3p:H-from seawards 3s:NH-come
 'They came from the direction of the sea in this direction'

In the sentences in (26) it is possible to insert the coordinator *pana* between the first verb (phrase) and the directional verb. In this case the two actions expressed by the verbs in (26) are performed consecutively. This is illustrated for (26b and c) in (27).

- (27)a. *m-oluk* *duu* *n-esin* *p-ana* *n-ini* *aali*
 3s:F-drop coconut.tree 3p:NH-fruit 3s:NH-go 3p:NH-go below
 'She dropped the coconuts, then, they went down'
- b. *ne-laagi* *m-aalim* *p-ana* *m-ama*
 person-woman 3s:F-go.up 3s:NH-go 3s:F-come
 'The woman went up, then, she came here'

When the position of the negator *dau* is manipulated a change in scope occurs. This is illustrated for (26a) in (28).

- (28)a. *yawa* *p-ulu* *dau* *p-ana* *aali*
 sago.tree 3s:NH-fall NEG 3s:NH-go below
 'The sago tree did not fall down [but rolled down]'
- b. *yawa* *p-ulu* *p-ana* *aali* *dau*
 sago.tree 3s:NH-fall 3s:NH-go below NEG
 'The sago tree fell, it did not go (all the way) down'

A different position of the aspect indicator *-ein* in the sentences of (26) yields a difference in scope of this aspect indicator. This is illustrated for (26b) in (29). Informants indicate that sentence-final *-ein* has an ambiguous scope, as in (29)b.

- (29)a. *m-oluk* *duu* *n-esin* *p-ein* *n-ini* *aali*
 3s:F-drop coconut.tree 3p:NH-fruit 3s:NH-finish 3p:NH-go below
 'After she had dropped the coconuts, they went down'
- b. *m-oluk* *duu* *n-esin* *n-ini* *aali* *p-ein*
 3s:F-drop coconut.tree 3p:NH-fruit 3p:NH-go below 3s:NH-finish
 (i) 'After she had dropped the coconuts (and) they had gone down'
 (ii) 'She dropped the coconuts, after they had gone down (...she went away)'
- c. *m-oluk* *duu* *n-esin* *p-ein* *n-ini* *aali*
 3s:F-drop coconut.tree 3p:NH-fruit 3s:NH-finish 3p:NH-go below

p-ein
 3s:NH-finish
 'After she had dropped the coconuts, after they had gone down'

The verbs or verb phrases in the sentences of (26) may be reversed, but these constructions (30) are completely different in meaning from the sentences in (26). They, in fact, form two separate sentences, as evidenced by the necessity of pronominal reference to the object in the second clause in (30b) and (30d).

- (30)a. *yawa* *p-ana* *aali* *p-ulu*
 sago.tree 3s:NH-go below 3s:NH-fall
 'The sago tree went down, it fell'
- b. *duu* *n-esin* *n-ini* *aali* *m-oluk* *ma-s*
 coconut.tree 3p:NH-fruit 3p:NH-go below 3s:F-drop NOM-PERF

en
 DEM
 'The coconuts went down, she dropped them'
- c. *ne-laagi* *m-ama* *m-aalim*
 person-woman 3s:F-come 3s:F-go.up
 'The woman came here, she went up'
- d. *kuwok* *p-ama* *yi-sik* *ma-s* *ow*
 stringbag 3s:NH-come 3p:H-take NOM-PERF DEM
 'the stringbag came here, they took it'
- e. *y-imi* *y-ein* *man*
 3p:H-come 3p:H-from seawards
 'They came here, they (came) from the direction of the sea'

3.5 Aspect marking

As was mentioned before, perfective aspect in Moi can be indicated by the verb *-ein* 'to finish'. Verb sequences of this kind may be of the type same-subject (31a) or different-subject (31b-c).

- (31)a. *ta-laagi* *t-a* *m-aagi* *m-ein-s*
 1s-woman 1s-possess 3s:F-die 3s:F-finish-PERF
 'My wife is already dead'
- b. *m-ei* *kiiyouk* *p-ein* *ma-saak* *aliwe*
 3s:F-pull k.o.rope 3s:NH-finish 3s:F-tie snare
 'After she had pulled a 'youk'-rope, she made a snare'
 (lit.: 'She pulled a 'youk'-rope, it was finished, she made a snare')
- c. *yu-guyuk* *p-ein* *y-osu* *keik*
 3p:H-bury 3s:NH-finish 3p:H-to house
 'After they had buried it, they went home'
 (lit.: they buried, it was finished, they to house')

Insertion of the coordinator *pana* is not possible in (31). So, the constructions in (32) are ungrammatical.

- (32)a. **ta-laagi* *t-a* *m-aagi* *p-ana* *m-ein-s*
 1s-woman 1s-possess 3s:F-die 3s:NH-go 3s:F-finish-PERF
- b. **m-ei* *kiiyouk* *p-ana* *p-ein* *ma-saak aliwe*
 3s:F-pull k.o.rope 3s:NH-go 3s:NH-finish 3s:F-tie snare
- c. **yu-guyuk* *p-ana* *p-ein* *y-osu* *keik*
 3p:H-bury 3s:NH-go 3s:NH-finish 3p:H-to house

When the negator *dau* is placed after the first verb in the sentences of (31), as in (33), (33a) is rejected. As to the grammaticality of (33b) and (33c) there is no agreement amongst native speakers.

- (33)a. **ta-laagi* *t-a* *m-aagi* *dau* *m-ein-s*
 1s-woman 1s-possess 3s:F-die NEG 3s:F-finish-PERF
- b. *?m-ei* *dau* *kiiyouk* *p-ein* *ma-saak* *aliwe*
 3s:F-pull NEG ko.rope 3s:NH-finish 3s:F-tie snare
 ?'After she had not pulled the 'youk' rope, she made a snare'
- c. *?yu-guyuk* *dau* *p-ein* *y-osu* *keik*
 3p:H-bury NEG 3s:NH-finish 3p:H-to house
 ?'After they had not buried it, they went home'

When in the sentences in (31) the negator is positioned directly following the aspectual verb, then (34a) is unacceptable, and in (34b and c) the scope of the negation is only over the aspectual verb.

- (34)a. **ta-laagi* *t-a* *m-aagi* *m-ein-s* *dau*
 1s-woman 1s-possess 3s:F-die 3s:F-finish-PERF NEG
- b. *m-ei* *kiiyouk* *p-ein* *dau* *ma-saak* *aliwe*
 3s:F-pull k.o.rope 3s:NH-finish NEG 3s:F-tie snare
 'She pulled a 'youk'-rope, it was not finished, she made a snare'
- c. *yu-guyuk* *p-ein* *dau* *y-osu* *keik*
 3p:H-bury 3s:NH-finish NEG 3p:H-to house
 'They buried (it), it was not finished, they went home'

Insertion of the aspect indicator *-ein* in the sentences of (31) yields ungrammatical constructions (35).

- (35)a. **ta-laagi* *t-a* *m-aagi* *p-ein* *m-ein-s*
 1s-woman 1s-possess 3s:F-die 3s:NH-go 3s:F-finish-PERF

- b. **m-ei* *kiiyouk* *p-ein* *p-ein* *ma-saak* *aliwe*
 3s:F-pull k.o.rope 3s:NH-finish 3s:NH-finish 3s:F-tie snare
- c. **yu-guyuk* *p-ein* *p-ein* *y-osu* *keik*
 3p:H-bury 3s:NH-finish 3p:NH-finish 3p:H-to house

The order of the verbs in (31a) cannot be reversed, as shown by the unacceptable (36a). In (31 b and c) the order of the verbs can be reversed, but sentences with a completely different meaning occur. This is illustrated in (36b and c).

- (36)a. **ta-laagi* *t-a* *m-ein* *m-aagi-s*
 1s-woman 1s-possess 3s:F-finish 3s:F-die-PERF
- b. *p-ein* *m-ei* *kiiyouk* *ma-saak* *aliwe*
 3s:NH-finish 3s:F-pull k.o.rope 3s:F-tie snare
 'It was finished, she pulled a rope, she tied a snare'
- c. *p-ein* *yu-guyuk* (*sawusu*) *y-osu* *keik*
 3s:NH-finish 3p:H-bury (head) 3p:H-to house
 'It was finished, they buried a head, they went home'

4 Conclusion

In the previous sections, different types of verb sequences in Moi were subjected to syntactic tests in order to determine whether these constructions qualify as SVCs or as coordinate constructions.

In section 3.1, same-subject verb sequences were investigated. In these verb sequences a distinction has been made between constructions like (4) (repeated below), and constructions with a "prepositional verb" as second member, as in (7) (repeated below).

- (4) *n-ei* *m-ee-ta*
 3s:F-crie 3s:F-jump
 'She cried, she jumped'

- (7)a. *aro* *n-esin* *n-oolok* *n-osu* *aali*
 breadfruit.tree 3p:NH-fruit 3p:NH-fall 3p:NH-to below
 'Fruits of the breadfruit tree fell down'

- b. *m-ibili* *m-ein* *taasik* *aali-ow*
 3s:F-emerge 3s:F-from sea below-DEM
 'She came up from the sea down there'

- c. *dimem* *mo-tolo* *m-ai* *wilinsa-keik-laagi* *ow*
 mother 3s:F-wait 3s:F-at:s ladder-house-woman DEM
 'The mother waited at the ladder of the women's part of the house'

The results of the tests are as follows: it is possible to insert a coordinator; the scopes of negator and aspect indicator are not over the whole series of verbs, but over the verb which immediately precedes the negator or aspect indicator; and the order of verbs is reversible without a change in meaning. Thus, the construction in (4) consists of two juxtaposed single verb clauses.

Another type of same-subject verb sequences consists of constructions with a "prepositional verb" as second member, as in (7). The results of the tests with the coordinator *pana* and the reversability of the verbs, are in favour of SVCs: it is not possible to insert a coordinator and the order of the verbs is not reversible. The results of the test with the aspect indicator *-ein* demonstrate that, when the aspect indicator is positioned directly following the first verb, native speakers did not agree on the grammaticality of these constructions. But, when the aspect indicator is positioned after the second ("prepositional") verb, both verbs fall within its scope, and thus providing an argument for considering these constructions as SVCs. The results of the test with the negator are in favour of coordinate constructions, since the negation has as its primary scope the verb immediately preceding the negator. Thus, these constructions are likely to be SVCs, since the results of three of the four tests are in favour of SVCs.

In section 3.2, different-subject verb sequences with a "prepositional verb" as second member, as in (14) (repeated below), were investigated.

- (14)a. *wi-sik* *p-osu* *wi-gik* *p-ana* *lun*
 3s:M-take 3s:NH-to 3s:M-mouth 3s:NH-go inside
 'He put it into his mouth'
 (lit.: He took, it to his mouth, it went inside)
- b. *wi-sik* *p-ein* *dafele* *laan-ow*
 3s:M-take 3s:NH-from raft above-DEM
 'He took it from the raft up there'
- c. *n-auk* *p-au* *kamsaser*
 2s-place 3s:NH-at:s place.mat
 'You put it on a place mat'
- d. *m-uluk* *n-uu* *ana-ow*
 3s:F-put.down 3p:NH-at:p there-DEM
 'He put them down there'

The results of the tests are rather diverse for each "prepositional verb", and therefore they will be dealt with separately here.

Firstly, different-subject verb sequences with the directional "prepositional verb" *-osu*, like (14a): The coordinator *pana* can be inserted between the two verbs or verb phrases, and the scope of the negation changes when the position of the negator is manipulated. These results are in favour of a coordinate construction. The test with the aspect indicator *-ein* shows that when the aspect indicator is placed directly after the first verb (phrase), only the first verb (phrase) falls within its scope. But, when it is positioned following the second verb (phrase), then both verbs or verb phrases fall within its scope and not only the second verb, thus providing an argument for considering (14a) as a SVC. The order

of the verbs can be reversed, but a change in meaning occurs, and thus in favour of SVCs. Based upon these results it is difficult to determine whether a construction like (14a) is a SVC or a coordinate construction.

Secondly, different-subject verb sequences with the directional "prepositional verb" -*ein* 'from', like (14b): Also with regard to verb sequences of this type it is problematic to determine whether they have to be considered as SVCs or as coordinate constructions, because the results of two tests (insertion of *pana* is possible and scope of negation is over separate verbs) are in favour of coordinate constructions. On the other hand, the results of the tests with the aspect indicator (when positioned after the second verb, both verbs fall within its scope) and reversability of the order of verbs (yields a change in meaning), are in favour of SVCs.

Thirdly, different-subject verb sequences with the locative "prepositional verb" -*au* (singular)/-*uu* (plural), like (14c): The results of three tests are in favour of SVCs: it is not possible to insert the coordinator *pana*; the scope of the aspect indicator is over both verbs, when positioned after the second verb; and reversing the order of the verbs causes a change in meaning. Only the results of the tests with the negator is not in favour of SVCs. Thus, verb sequences of this type are good candidates for SVCs.

In section 3.3, complex verbs, as in (21a) (repeated below), were investigated. These complex verbs consist of two verb stems of which only the first member carries the prefix cross-referencing the subject.

- (21)a. *aa-y-umu-faagu* *p-ana* *aali*
 DUAL-3p:H-leave-collect 3s:NH-go below
 'They both left together down there'
- b. *we-wedek-ankar* *wi-nintowo-kidi* *k-en*
 3s:M-squeeze-cheat 3s:M-finger-nail NEAR-DEM
 'He did as if he squeezed his finger nails'
- c. *w-ana-towo* *yak*
 3s:M-go-get fire
 'He went to get fire'
- d. *aa-ya-kamun-ti* *n-ei* *kedenlas*
 DUAL-3p:H-close-cover 3p:NH-with leaf
 'They both covered them with leaves'
- e. *te-feden* *kemaina* *t-amu-san* *nin* *om*
 1s-arrive because 1s-come-get 2s EMP
 'I came because I (wanted) to meet you'

The results of the tests are all in favour of SVCs, but morphologically, these constructions behave like single verbs, viz. the two verb-stems receive one prefix to cross-reference the subject, and thus they are considered to be verbal compounds.

In section 3.4, verb sequences with the directional verb -*ana/ini* 'to go' or -*ama/imi* 'to come' as second member were investigated. Examples of this type are presented in (26), and are repeated below.

- (26)a. *yawa* *p-ulu* *p-ana* *aali*
 sago.tree 3s:NH-fall.down 3s:NH-go below
 'The sago tree fell down'
- b. *m-oluk* *duu* *n-esin* *n-ini* *aali*
 3s:F-drop coconut.tree 3p:NH-fruit 3p:NH-go below
 'She dropped the coconuts'
- c. *ne-laagi* *m-aalim* *m-ama*
 person-woman 3s:F-go.up 3s:F-come
 'A woman went up in this direction'
- d. *yi-sik* *kuwok* *p-ama*
 3p:H-take stringbag 3s:NH-come
 'They took the stringbag here'
- e. *y-ein* *man* *y-imi*
 3p:H-from seawards 3p:H-come
 'They came from the direction of the sea in this direction'

The results of the tests applied to the constructions in (26) are as follows: insertion of a coordinator is not possible; the scope of the negator is not over both verbs, but only over the verb (phrase) that immediately precedes the negator; manipulation of the aspect indicator showed that the verbs or verb phrases of the sequence belong to different predicates; and the order of the verbs may be reversed, but a radically change in meaning occurs. Thus, only the results of the test reversing the order of verbs are in favour of SVCs, while the results of the other three tests are in favour of coordinate constructions.

In section 2.5, verb sequences with the aspect indicating verb *-ein* were investigated. A distinction has been made between sequences with same-subject, like (31a) (repeated below) and different subject, as in (31b-c) (repeated below).

- (31)a. *ra-laagi* *t-a* *m-aagi* *m-ein-a*
 1s-woman 1s-possess 3s:F-die 3s:F-finish-PERF
 'My wife is already dead'
- b. *m-ei* *kiiyouk* *p-ein* *ma-saak* *aliwe*
 3s:F-pull k.o.rope 3s:NH-finish 3s:F-tie snare
 'After she had pulled a 'youk'-rope, she made a snare'
 (lit.: 'She pulled a 'youk'-rope, it was finished, she made a snare')
- c. *yu-guyuk* *p-ein* *y-osu* *keik*
 3p:H-bury 3s:NH-finish 3p:H-to house
 'After they had buried it, they went home'
 (lit.: they buried, it was finished, they to house')

In the constructions of (31), it is not possible to insert a coordinator. The test with the negator showed that in (31a) neither the verb sequence, nor the two verbs separately, can

be negated. In (31b) and (31c) the aspect indicating verb can be negated separately. The test with the aspect indicator shows that it is not possible to place the aspect indicator directly after the first verb (phrase) or the second verb (phrase). The order of the verbs in (31a) is not reversible. In (31b) and (31c) the order of the verbs may be reversed, but this yields completely different sentences. Thus, a construction like (31a) is very likely a SVC. Constructions like (31b) and (31c) are good candidates for SVCs, since only the results of the test with the negator is not in favour of SVCs, but the results of the other three tests are.

Abbreviations

DEM	demonstrative pronoun
F	feminine
H	human
M	masculine
NEG	negator
NH	non-human
NOM	nominalizer
p	plural
PERF	perfective
s	singular
SVC	serial verb construction

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