Multiple Verb Constructions in Khoekhoe

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1 Introduction

In this paper, I explore the properties of multiple verb constructions in the language Khoekhoegowab (Family: Khoisan, Southern Africa, Central). Khoekhoe (short for Khoekhoegowab) uses multiple verb constructions very productively. Typical examples of this construction are given in (1) and (2).

(1) TÌ(){ }та ke ṭai{-}e ra sāi{-} ṭū u $L$

1st DEC rice-CASE ASP2 cook eat

I am cooking-eating rice repeatedly.

(2) TÌ(){ }та ke ṭam{-}e ra ꞌhō ṭu u sa $s$

I DEC water-CASE ASP pour put pot in

I am pouring water in the pot.

1 DEC = declarative marker, ASP = aspect, I-PST = Immediate past, R-PST= remote past, FUT = future.

2 ra has been described as a aspect marker (Hagman) since it marks progressive aspect. However, there is no difference in distribution between ra and other tense markers like n, ko, ke. Hence I have assumed no difference in the positions of ra and other tense markers in my analysis (they all appear in head of tense phrase (TP/IP))
A serial verb is defined as a sequence of two or more verbs and their complements (if any) with one subject and one tense/aspect value which are not separated by any overt marker of co-ordination or subordination. (definition due to Collins (1997)). A compound verb is defined similarly with the additional constraint that the verbs be adjacent (Collins 2002).

These verbs in Khoekhoe have been referred to as compound verbs in the literature (Haacke 1998, Hagman 1997), possibly because they appear adjacent to each other in typical constructions like (1) and (2) and because of the tonal interactions seen between the tones on the two verbs. However, it is seen later that these verbs do not necessarily have to be adjacent.

2 Background

2.1 Types of Serial/Compounds Verbs

Cross-linguistically, serial/compound verb constructions can be broadly divided into the following types.

1. Consecutive – Two or more consecutive actions, usually with or without direct object sharing, as in (1).

2. Non-consecutive – These are of different kinds such as resultant, modificational, benefactive, instrumental. An example of a resultant construction in Khoekhoe was given in (2) above.
2.2 Properties

Typical serial/compound verbs show the following properties:

1. \( V_1 \) and \( V_2 \) share a single tense/aspect marker and other markers of syntactic dependency like relativizer or nominalizer.

2. Negation has scope over both verbs, and hence they cannot be negated separately. \( V_1 \) and \( V_2 \) are always adjacent.

3. \( V_1 \) and \( V_2 \) move as a group.

4. In compound verbs, \( V_1 \) and \( V_2 \) are adjacent, and behave as a morphological unit. Hence in tone languages, they may undergo tonal interactions.

2.3 Structure

Due to the similarities between serial verbs and verbal compounds, it is desirable that they have a similar underlying structure. Collins (2002) proposes a structure like (3b) for serial verbs in the head initial language Ewe (Collins 1997) and compound verbs in Hoan (also head initial). Here, \( VP_2 \) is the complement of \( V_1 \). Object sharing is implemented through PRO.

\[
(3a) \quad \text{Ma a- qllhu } l^o \text{ djo ki kx}^2 \text{u na} \quad \text{(Collins 2002, Hoan)}
\]

\[
1\text{SG PROG pour put.in water PART pot in}
\]

\[
I \text{ am pouring water into the pot.}
\]
In the tree shown in (3b), $V_1$ and $V_2$ are treated as compound verbs. The two verbs are raised to adjoin to $v$ (head movement and internal adjunction). In this way, the adjacency requirement of the verbs is captured. In contrast, in a serial verb construction, the two verbs or at least one ($V_2$) would remain in situ, thus making it possible for other elements to occur between the two verbs. Thus the base generated position of the verbs in both compound and serial constructions is the same. This explains the similarities between the two constructions. Collins (2002) suggests that this might be a parameter setting, so that a language can have either serial or compound verbs.
2 Data

2.1 Types of constructions

2.1.1 Consecutive Verbs

In this construction, V1 and V2 denote two actions taking place one after the other (V2 after V1).

(3a) səi (3b) +ʔuº (3c) səi +ʔuº

cook eat cook eat

(3d) Tt̥tá³ kë rãsi-e rà səi +ʔuº ]%L

1st DEC rice-CASE ASP cook eat

I am cooking-eating rice repeatedly

In Khoekhoe consecutive verbs seem to get an obligatory repetitive interpretation. There can also be more than two verbs as in (4)

(4) Tt̥tá kë rãsi-e rà lìamà səi +ʔuº ]%L

1st DEC rice-CASE ASP buy cook eat

I am cooking-eating-buying rice

---

3 This gloss may not be accurate since ta appears to be an agreement morpheme agreeing with the subject. However I am unclear about the exact nature of this morpheme and hence have glossed it simply as 1st person.

4 The actual tone on the last vowel in (3a) as seen in Praat is lower than the citation form. This has been indicated by the low boundary tone. In some cases like the PP in sentence (3), the citation form has not been elicited since it was not relevant to the investigation. In such cases I have indicated the actual tone on the vowel as seen in Praat.
2.1.2 Resultant

In this construction, V2 is the result of V1

(5a) ŋ+ãú  (5b) ɬámũ  (5c) ŋ+ãú ɬámũ
       hit       kill       hit-kill

(6) Tì tà ké  kʰòò-è  kò  ŋ+ãú ɬámũ
    1st     DEC someone-CASE I-PST hit      kill
    I hit someone dead

(7a) ɬ²hòò  (7b) ɬàà  (7c) ɬ²hòò ɬàà
     pour    put in     pour-put

(8) Tì tà ké  ɬ²ám-è  rà  ɬ²hòò ɬàà súš ŋ!ã˘
    1st     DEC water-CASE ASP pour put      pot in
    I pour-put water in the pot (once)

In this type of construction, there is no repetitive interpretation.

2.1.3 Modificational

In this construction, V2 acts like an adverb modifying V1. An example of a modificational construction is (9). There is no repetitive interpretation.

\[1\] I am not sure if there is a repetitive sense in this sentence.
2.2 Properties

2.2.1 One tense-aspect value

Verb-verb constructions in Khoekhoe can have only one tense value as seen in (10a-d). It is not possible to have more than one tense value in a sentence (11a-b).

(10a) Ti’tá kë nµ g±ã’ë únû ]%L
I DEC FUT call change
I will call differently.

(10b) Ti’tá kë rãsí-ê rà sã’i+ũû ]%L
1st DEC rice-CASE ASP cook eat
I will cook-eat rice repeatedly

(10c) Ti’tá kë rãsí-ê kò sã’i+ũû ]%L
1st DEC rice-CASE I-PST cook eat
I cooked-ate rice repeatedly
(10d) Ti t’a ké rà̃sí̀-è kè sà̀ì ñ+rù̀ ñù́ ]%L
1st DEC rice-CASE R-PST cook eat
I cooked-ate rice repeatedly

(11a) *Ti t’a ké rà̃sí̀-è rà sà̀ì ñ+rù̀ ñù́ ]%L
1st DEC rice-CASE ASP cook ASP eat
I am cooking-eating rice repeatedly

(11b) *Ti t’a ké rà̃sí̀-è rà sà̀ì ñ+rù̀ ñù́ ]%L
1st DEC rice-CASE ASP cook eat ASP
I am cooking-eating rice repeatedly

This is true of resultant constructions as well, as seen in (12a-b)

(12a) Ti t’a ké kò̃kè̀-è rà/ñù/kè/kè rjàà́ñ/ñ!á̃ù ]%L
I DEC someone-CASE TENSE hit kill
I hit someone dead (once)

(12b) *Ti t’a ké kò̃kè̀-è rà rjàà́ñ rà ]%L
I DEC someone-CASE ASP hit ASP kill
I hit someone dead (once)
2.2.2 Negation

The two verbs can only be negated together

(13) Ti’tá kè ràsì-è ra sàrì +ù u támáhà

1st DEC rice-CASE ASP cook eat NEG

*I do not cook-eat rice

*I do not cook but eat rice

*I cook but do not eat rice

(14) Ti’tá ké kʰè-è kò nj’ā’u !ā’u támáhà

1st DEC someone-CASE I-PST hit kill NEG

*I did not hit someone dead.

2.2.3 V₁ V₂ move as a group

(15) sàrì +ù u tá ké ràsì-è rà/nì/kè/kò \%

cook eat 1st DEC rice-CASE ASP

*I cook-eat rice repeatedly

(16) nj’ā’u !ā’u tá ké kʰè-è kò \%

hit kill 1st DEC someone I-PST

*I hit someone dead.

2.2.4 Object cannot occur between the two verbs

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6 Other word orders in the sentence are also possible but have not been investigated here.
(17) *Ti tā kē rā sāi̍ rāsí-ē ⁷ūū

1ˢᵗ DEC ASP cook rice-CASE eat

I cook -eat rice.

(18) *Ti tā kē kò ⁷āù kʰê-ē ⁷ám

1ˢᵗ DEC I-PST hit someone kill

I hit someone dead.

2.2.5 Adverbs cannot appear between the two verbs

(19) ⁷ip kē !⁷aísé rāsí-ē kò sāi̍ ⁷ūū ⁷L

He DEC quickly rice-CASE I-PST cook eat

He cook-eats rice quickly

(20a) *⁷ip kē rāsí-ē kò sāi̍ !⁷aísé ⁷ūū

He DEC rice-CASE I-PST cook quickly eat

(20b) *Ti tā kē kʰê-ē kò ⁷āù !⁷aísé ⁷ám

1ˢᵗ DEC someone I-PST hit quickly kill
4 Tonal interaction between V1 and V2

It was seen above that there is some tonal interactions between the two verbs (the tones of the verbs in a combined form are different from the tone on each individual verb). Haacke (1999) describes this interaction as the following.

In a V1V2 compound, a tone change rule (called the flip-flop rule) applies to the tone on V1. According to this rule, if the tone on V1 is the left hand side tone indicated in (21) below, it changes to the tone on the right hand side.

(21)  
\[12 \rightarrow 13\]
\[32 \rightarrow 22\]
\[43 \rightarrow 24\]

In addition, he notes the following semantic difference in the compound verb, depending on whether V2 has the citation tone or sandhi\(^7\) tone.

(1) In a V1 V2 compound, V1 undergoes the flipflop rule and V2 is in its citation form. These compounds are resultative constructions (Do v1 with the result V2).
(2) In a V1 V2 compound, V1 undergoes the flipflop rule and V2 is in its sandhi form. These compounds are “adverbial modification of manner”.

Some minimal pairs of such verbs were investigated.

\(^7\)In many compound constructions, including noun-noun, noun-verb etc., one component undergoes a tone change from its regular (citation) form to a modified tone called the sandhi form according to certain systematic rules.
(21) $V_1$: $g+$'a'

call

$V_2$: únù

change

4.1 $V_2$ in Citation form: (Resultative Construction)

(22) $g+$‘a’ únù

call change
call to change

(23a) Tî tâ kè nì $g+$’a’ únù]

1st DEC FUT call change

I will call to change (behaviour of someone) (once)

(Call out a reprimand to a child, for e.g.)

In order to observe tones without interference from boundary conditions, I have changed the word order as in (23b)

(23b) $g+$‘a’ únù tâ kä nì ]%L

call change 1st DEC FUT

I will call to change

---

*The tone on $g+$‘a’ is given as $g+$‘a’ in the dictionary.*
4.2 V2 in Sandhi form (Modificational Construction)

(24) $V_1 V_2$
    $g\#\#a'i\, \#u\#u$

    call change

call in a changed manner (adverbial modification)

(25a) Ti\#a\#\# k\#\#\#n\#\# $g\#\#\#a'i\, \#u\#u\#\# l\#L$

    1st DEC FUT call change

* I will call differently. *

(25b) $g\#\#a'i\, \#u\#u\# t\#a\#k\#e\#n\#l\#L$

    call change 1st DEC FUT

* I will call differently. *

5 Structure of Serial/Compound Verbs in Khoekhoe

In this section, I modify the analysis of Collins (2000) to apply it to the verb-verb constructions in Khoekhoe. I assume a Kaynean analysis, in that heads are always to the left of complements.
The structure for (8) is given in (26). In this tree, VP₂ is the complement of V₁. I also adopt the basic sentence structure proposed in Washburn (2003). In this analysis, all arguments (subject, object, indirect object) undergo movement to the specifier of T (Washburn 2003). This analysis has been proposed to capture the fact that all arguments can appear with the same case marker.

(26)

According to Collins (2002), the two verbs raise and adjoin to v in a compound verb construction, whereas they remain in situ (at least one verb, V₂ remains in situ) in a serial verb construction. Under the current assumptions the word order facts of Khoekhoe are
captured by either alternative. Hence we will leave both options open at this point. The data introduced in the next section will throw some light on this point.

5 More Data

The data in this section shows that certain elements can appear between V1 and V2.

5.1 Tense marker between V1 V2

(27) Tiťá ké ,llám-ẻ  | | ²hò ो rà/-router/kè +àà  sús ṣ!á“
    I    DEC  water-CASE pour TENSE put pot in
    * I poured water into pot once.

(28) Tiťá ké  ràsí-ẻ  sāi  rà/-router/kè 4[u u] L
    I    DEC  rice-CASE cookI-PST eat
    * I cook-ate rice once

In the resultant construction (27), the interpretation of the sentence does not change from (8). In the consecutive construction (28), however, the interpretation changes from a repetitive one (as in (1)) to a non-repetitive one. This indicates that the structure of consecutive construction is different from the resultative one. Cross linguistically, there are some basic difference between consecutive and other constructions. For instance, in Hoan a morpheme ki is obligatory with consecutive compound verbs but not with resultative constructions (Collins 2002). This morpheme has been analyzed in Collins (2002) as an agreement morpheme, agreeing with a pluractional morpheme on a verb
(indicates plurality of verb or iterative aspect). Thus the Khoekhoe data fits nicely into the cross linguistic facts.

5.2 Adverbs

If the tense marker is in between V1 and V2, then adverbs can occur in between the verbs too as shown in (29). Contrast this with the situation in §2.2.5, where it was not possible for adverbs to occur between V1 and V2.

(29) Ti tà ké rāsi-è sāɾì nì !ʔāísè +ʔùù ]ₘₙₗ

I dec rice-acc cook fut quickly eat

I will cook rice (and) quickly eat (it).

(30) Ti tà ké rāsi-è sāɾì !ʔāísè nì +ʔùù ]ₘₙₗ

I dec rice-acc cook quickly fut eat

I will cook rice quickly (and) eat (it).

(31) Ti tà ké rāsi-è !ʔāísè sāɾì nì +ʔùù ]ₘₙₗ

I dec rice-acc quickly cook fut eat

I will quickly cook-eat rice.
It is seen from (29) and (30) that the adverb has local scope, indicating that this might be a conjunction structure. Contrast this with the resultative construction in (32) and (33). Here, the adverb cannot have local scope even if it is between the two verbs.

(32) Títá ké kʰèè-e ’äšé ɲ+ù kò ]àm][L
                   I   DEC someone-CASE quickly hit I-PST kill
                   I hit someone killing him. (both actions have happened quickly)

(33) Títá ké kʰèè-e ɲ+ù ’äšé kò ]àm][L
                   I   DEC someone hit quickly I-PST kill
                   I hit someone killing him. (both actions have happened quickly)

However, there are some indications that the action is not as tight knit as when V₁ and V₂ are adjacent, due to the semantic difference seen in (35) and (36).

(35) Títá ké ]àm-e ɲì ]²hèè ʰà-sù sùs ɾj!á”
                   I   DEC water FUT pour put pot in
                   I pour water in the pot (all water is poured in the pot)

(36) Títá ké ]àm-e ]²hèè ɲì ʰà-sù sùs ɾj!á”
                   I   DEC water pour FUT put pot in
                   I pour water in the pot (not all water has to poured in the pot).
In all these examples, it is not possible to move the V1 Tense V2 structure to the front of the sentence, as seen below in (37).

(37) *sắ̃ kò ̣̀ ụ́ tá ké ràsí-è

cook i-pst eat I DEC rice-acc

(38) ***hò ni àá tá ké llám-e sús njá

pour FUT put I DEC water pot in

**5.2 Iterative aspect marker ka between V1 and V2**

Another element that can occur in between the two verbs is ka\(^9\). This has been described by Hagman as a reduplication morpheme which occurs between two members of a reduplicated verb to convey a sense of repeated action, as in the sentence below

(39) ti tá ké ràsí-è rà ̣̀ ù ù kà ̣̀ ́ ụ̀̀ ụ́ ]\(_{\text{L}}\)

1st DEC rice-ACC ASP eat ka\(^{10}\) eat

I eat rice repeatedly.

This morpheme can also be used in an iterative but non-reduplicative manner as in (40)

(Hagman does not mention this use)

(40) Tì tát ké ràsí-è rà sắ̃ kà ̣̀ ́ ụ̀̀ ụ́ ]\(_{\text{L}}\)

---

\(^9\) Glossed as I-ASP

\(^{10}\) This may be a long vowel.
I repeatedly cook-ate rice.

Unlike a V1 Tense V2 combination, a V1 ka V2 combination can be moved to the front of the sentence.

(41) sā'ī kā ʰù u tā ké rāsī-ə ɾà]ₘₐL

cook I-ASP eat I DEC rice-CASE ASP

I repeatedly cook-ate rice.

(41) Tī'tā kē ʰàm-ə ɾà ʰōhō kā ʰàà sūs ṭj!ə̆

I DEC water-CASE ASP pour I-ASP put pot in

I poured water into something (glasses) and put them in the pot.” (glasses have to be plural) – Repeated action.

(42) Tī'tā kē ʰàm-ə ɾà ʰōhō ʰàà kā ʰōhō ʰàà sūs ṭj!ə̆

1st DEC water-CASE ASP pour put ASP pour put pot in

I am pouring water in the pot repeatedly.

However, both Tense and ka cannot occur between the two verbs as seen in (4). Nor is it possible to have an adverb with ka, as seen in (45)

(44) *Tī'tā kē ʰàm-ə ʰōhō (kò kā) / (kā kò) ʰàà sus ṭj!a
I DEC water-CASE pour (I-PST I-ASP)/(I-ASP I-PST) put pot in

(45) *Tì tā ké ràsi-è ra sā'ī kā 'īsé 3 ū u

I DEC rice-CASE ASP cook I-ASP quickly eat.

I repeatedly cook-ate rice.

(46) *Tì tā ké ràsi-è ra sā'ī 'īsé kā 3 ū u

I dec rice-acc asp cook quickly i-asps eat.

I repeatedly cook-ate rice.

Also note that there is another way of indicating repetitive aspect in Khoekhoe (47-48)

(47) Tì tā kè ràsi-è kóró sā'ī 3 ū u

I dec rice-asp rep.pst cook eat

I cook-ate rice repeatedly

(48) Tì tā kè rāsi-e sā' kóró 3 ū

I dec rice-asp cook rep.pst eat

I cook-ate rice repeatedly

(47-48) have the same meaning as the ones with ka. However, koro patterns with the tense markers in that V1 koro V2 cannot be fronted to the beginning of the sentence.
The above indicates that sentences with V1 ka V2 are different in structure with sentences with V1 Tense V2. I account for this difference by adopting the following structure.

In the V1 T V2 construction, V1 raises and adjoins to tense. V1 T V2 cannot move since there is a general restriction against movement of T as seen in (52)\(^{11}\).

(50) ātē kē īam-ē nī īhō sūs nj!ā`

I DEC water FUT pour pot in

\(^{11}\) An explanation for this restriction is beyond the scope of this paper. However, see Washburn (2003) for an analysis.
In order to account for sentences containing V1 ka V2, I propose an aspectual head which contains ka as in (53) V1 raises and adjoins to the ka. The Aspect phrase has no restriction on movement, hence it can move to the front of the sentence. In addition, due to the presence of the aspectual head, the verb cannot raise higher to adjoin to tense, thus making sentences with V1 Tense ka V2 impossible.
This analysis assumes the consecutive constructions are different from other constructions (following Collins 2002). In consecutive constructions, the verb has an iterative sense with or without ka. It has been proposed in relation to Hoan (Collins 2002), that consecutive constructions involve a form of conjunction of vP’s.

6 Contrasts between resultative and modificational constructions

Section 4 described the two types of non-consecutive construction which are distinguished from each other by the tone on V2 being in citation or sandhi form.

Let us look at these constructions from the syntactic point of view.
Table 1

<table>
<thead>
<tr>
<th></th>
<th>V₂ as a modification of manner of V₁</th>
<th>V₂ as result of V₁</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Sandhi form)</td>
<td>(Citation form)</td>
</tr>
<tr>
<td>1</td>
<td>Ti tái ké nì g+à’’ únù ]₪₃₀</td>
<td>Ti tái ké nì g+à’’ únù ]₪₃₀</td>
</tr>
<tr>
<td></td>
<td>I DEC FUT call change</td>
<td>I DEC FUT call change</td>
</tr>
<tr>
<td></td>
<td>*I will call differently (once)</td>
<td>*I will call to change (behaviour of someone) (once) (Call out a reprimand to a child, for e.g.)</td>
</tr>
<tr>
<td>2</td>
<td>g+à’’ únù tái ké nì ]₪₃₀</td>
<td>g+à’’ únù tái kè nì ]₪₃₀</td>
</tr>
<tr>
<td></td>
<td>call change I DEC FUT</td>
<td>call change I dec fut</td>
</tr>
<tr>
<td></td>
<td>*I will call differently (once)</td>
<td>*I will call to change (behaviour of someone) (once)</td>
</tr>
<tr>
<td>3</td>
<td>*</td>
<td>Ti tái kè g+à’’ nì únù ]₪₃₀</td>
</tr>
<tr>
<td></td>
<td>I DEC call FUT change</td>
<td>I DEC call FUT change</td>
</tr>
<tr>
<td></td>
<td>*I will call to change (once)</td>
<td>*I will call to change (once)</td>
</tr>
<tr>
<td>4</td>
<td>Ti tái ké kò g+à’’ únù ]₪₃₀</td>
<td>Ti tái ké kò g+à’’ únù ]₪₃₀</td>
</tr>
<tr>
<td></td>
<td>I DEC FUT call change</td>
<td>I DEC FUT call change</td>
</tr>
<tr>
<td></td>
<td>*I called differently (once)</td>
<td>*I called to change (once)</td>
</tr>
</tbody>
</table>
It is seen from Rows 3 and 6 in Table 1 that in the modificational construction, tense cannot appear between the two verbs. Rows 7 and 8 show that the iterative morpheme ka also cannot appear between them. This indicates a closer connection between the two verbs in the modificational construction as compared to the resultant construction. With respect to our analysis, it appears that V1 cannot raise to adjoin to the tense or aspect head. The reason for this are not clear at this point. There also seems to be a systematic tone change between. Another point of distinction between the two may be in the quality of the glottal closure between the two verbs (see Figure 1 and 2). It was seen in all three
tokens elicited that the glottal closure between V1 and V2 in rows 1, 2, 4, 5 in the modificational sentences was not complete, while in the resultant sentences there was a complete closure. However, in order to make claims about this aspect, more tokens have to be examined.\textsuperscript{12}

\textsuperscript{12} Another interesting aspect might be to investigate the nasalization between the two verbs by choosing V2 to have a nasalized click.
Figure 1: Call differently (fronted – table 1 row 2, col 1)
Figure 2 (table row 2, col 2)
Another verb pair also shows systematic behaviour similar to that mentioned above.

(50) \[ V_1 \quad \rightarrow \quad V_2 \]

\[
!^\text{xā} \text{i”} \\
\text{to shout/command}
\]

\[
\text{mā} \text{i”} \\
\text{put up (erect)}
\]

Table 2

<table>
<thead>
<tr>
<th></th>
<th>( V_2 ) as a modification of manner of ( V_1 )</th>
<th>( V_2 ) as result of ( V_1 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ti tā ké kò !xā i” mā i”</td>
<td>Ti tā ké kò !xā i” mā i”</td>
</tr>
<tr>
<td></td>
<td>I DEC FUT shout erect</td>
<td>I DEC FUT shout erect</td>
</tr>
<tr>
<td></td>
<td>( I \text{ chanted around. (repeatedly)} )</td>
<td>( I \text{ shouted to (make somebody) stand up. (once)} )</td>
</tr>
<tr>
<td>2</td>
<td>!xā i” mā i” tā ké kò ]₄L</td>
<td>!xā i” mā i” tā ké kò ]₄L</td>
</tr>
<tr>
<td></td>
<td>shout erect I DEC I-PST</td>
<td>shout erect I DEC I-PST</td>
</tr>
<tr>
<td></td>
<td>( I \text{ chanted around. (repeatedly)} )</td>
<td>( I \text{ shouted to (make somebody) stand up. (once)} )</td>
</tr>
<tr>
<td>3</td>
<td>*</td>
<td>Ti tā ké !xā i” ko mā i”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>I DEC call I-PST change</td>
</tr>
<tr>
<td></td>
<td></td>
<td>( I \text{ shouted to (make somebody) stand up. (once)} )</td>
</tr>
</tbody>
</table>
I have not been able to verify the construction with ka for this pair of verbs. Also, it is not clear why there is a repeated reading in Table 2 Col 1. This verb combination needs to be investigated more.

Since even ka cannot appear between the verbs in the modificational construction, and V2 appears in its Sandhi form, this can be considered to be the prototypical compound verb. Phonetic evidence as mentioned earlier also points towards this. Collin's (2002) analysis for compound verbs in which the two verbs adjoin to v can account for the effects seen in this construction. The other constructions however are more like serial verbs in which the verbs do not adjoin to v but may raise and adjoin to an aspect head or tense head.

7 Concluding remarks and future work

This paper provided a preliminary investigation into the facts concerning multiple verb constructions in Khoekhoe. It was seen that in some respects, these constructions reflect cross linguistic tendencies seen in other African languages. In order to confirm that the observations noted in this paper are robust, more data needs to be collected. Only resultant and a few modificational constructions have been examined in detail here I would like to document all possible types of multiple verbs seen in Khoekhoe (like benefactive, double object, etc.) Also more examples of the constructions currently under investigation will be helpful towards confirming the generalizations seen here. In addition, some of the gaps in the present data should be filled. The phonetic correlations
of syntactic structure are also an interesting area to pursue. In particular I would like to investigate if the tonal changes and the glottal closure quality which seem to accompany modificational versus resultative constructions are robust and investigate the structure of each construction in more detail.

References


