Abstract

This paper addresses a curious condition on non-subject relative clauses (NSRCs) in Nzadi, a previously unstudied B.80 Bantu language spoken in the Democratic Republic of the Congo. While a number of other Bantu languages allow or require the subject of an NSRC to occur after the verb, what makes Nzadi different from these languages is that when the full noun phrase subject optionally occurs before the verb, the verb must be followed by a co-referential pronominal recapitulative pronoun (‘the child that the woman saw she’). The present study documents this phenomenon in some detail and draws parallels with recapitulative post-verbal subject pronouns in both NSRCs and negative constructions in other Bantu languages.

1. Introduction

A very common property within Bantu languages is for a subject noun phrase to appear post-verbally in a non-subject relative clause (NSRC). Representative examples from Dzamba (Bokamba 1979: 18) and Shona (Demuth & Harford 1999: 42) are seen in (1a) and (1b), respectively (numbers in the glosses refer to noun classes).

(1) a. ízíbata ízi-ézá-ákí ómama íloso
   9.duck 9.REL-give-PAST 1.mama 5.rice
   ‘the duck to which the mother gave the rice’

b. mbatya dza-v-aka-son-er-a vakadzi mwenga
   10.clothes 10.REL-2AGR-PAST-sew-APPL-INFL 2.women 1.bride
   ‘clothes which the women sewed for the bride’
While Nsuka Nkutsi (1982: 77) refers to such post-verbal subject marking as “[le] type le plus représenté au relativ objectif à sujet lexical” within Bantu, the same structure typically generalizes to other NSRCs, e.g. relatives formed on a locative or other adjunct. Recently, van der Wal (2010) has shown that when the post-verbal subject is pronominal in Makhwua, it appears in a possessive form (see (45) below), thereby adding a further mystery to the phenomenon. In this paper I take a close look at NSRCs in Nzadi, a previously unstudied Bantu language spoken by a community of fishermen on the Kasai River in the Democratic Republic of the Congo.* When the current study began in the Fall of 2008 Nzadi was not even mentioned in the linguistic literature, e.g. in the Ethnologue (Gordon & Grimes 2005). An unpublished word list of Nico Burssens’ had apparently been the only linguistic investigation of the language. Maho (2009) has since classified Nzadi as B.865, putting it in the same group as Dzing (B.86) and a few other small, understudied languages.

The paper is organized as follows: After a brief overview of Nzadi in Section 2, I give the basic facts concerning Nzadi NSRCs in Section 3, followed by discussion in Section 4 and further examples of post-verbal subjects in Section 5. I conclude in Section 6 with a brief comparison of recapitulative, post-verbal pronoun subjects in NSRCs and negative constructions in other Bantu languages.

2. A brief overview of Nzadi

From a Bantu perspective, it is striking how short words are in Nzadi: Out of a lexicon of 1,000 entries, 859 (or 85.9%) contain a monosyllabic stem, while 141 (or 14.1%) have a bisyllabic stem. While many of the latter are reduplications, borrowings or compounds, the monosyllabic stems often derive transparently from longer Proto-Bantu (PB) forms via loss of consonants and vowels, but with preservation of the tones (cf. Cohen 2011). Thus, as seen in (2), PB trisyllabic *L-H-L such as those found in Meeussen (1967) become Nzadi monosyllabic LHL.

* The materials presented in this paper are based on a year long study of Nzadi in a field methods course in 2008–9 and follow-ups, based on the speech of Simon Nsielanga Tukumu, S.J., a native of Bundu. I am extremely grateful to Simon for his insights, to Thera Crane, who served as graduate research assistant, and to the students in the course for their contributions and devotion to the Nzadi project which has resulted in Crane, Hyman & Tukumu (2011). An earlier version of this paper was presented at the Language Documentation & Linguistic Theory (LDTLT2) conference at the School of Oriental and African Studies, London, on November 13, 2009. I would like to thank that audience as well as José Maria Lahoz, Maria Polinsky, Lisa Cheng, Tania Kuteva, and two anonymous reviewers for their comments and suggestions concerning this study.
Post-Verbal subject in the Nzadi relative clause  

Unlike PB, Nzadi sentences are largely isolating: verbs are generally monosyllabic, e.g. /bùl/ ‘hit’, /túm/ ‘send’, while nouns may or may not have singular and plural V- or N- prefixes: sìŋ ‘net(s)’, ò-káàr ‘woman’, à-káàr ‘women’, ñ-tsúr ‘animal(s)’. Although these prefixes derive from PB noun classes, as indicated in (3), the only true noun class agreement which remains (with some obscuration) is the “connective” (genitive) marker /é/ used with all PB noun classes except classes 1 and 9 as shown in (4).

(3)  

<table>
<thead>
<tr>
<th>PB</th>
<th>singular</th>
<th>plural</th>
<th>PB</th>
</tr>
</thead>
<tbody>
<tr>
<td>1, 3</td>
<td>ò-</td>
<td>è-</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>i-</td>
<td>à-</td>
<td>2, 6</td>
</tr>
<tr>
<td>7</td>
<td>è-</td>
<td>N-</td>
<td>10</td>
</tr>
<tr>
<td>9</td>
<td>N-</td>
<td></td>
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</tbody>
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(4)  

<table>
<thead>
<tr>
<th></th>
<th>singular</th>
<th>plural</th>
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<tbody>
<tr>
<td></td>
<td>human</td>
<td>non-human</td>
</tr>
<tr>
<td></td>
<td>human</td>
<td>non-human</td>
</tr>
<tr>
<td>ò-lúm mì`</td>
<td>‘my husband’ (1)</td>
<td>à-lúm é bì</td>
</tr>
<tr>
<td>ò-sìm è mì</td>
<td>‘my rope’ (3)</td>
<td>è-sìm è mì</td>
</tr>
<tr>
<td>ì-kọ́ŋ è mì</td>
<td>‘my spear’ (5)</td>
<td>à-kọ́ŋ è mì</td>
</tr>
<tr>
<td>è-túŋ è mì</td>
<td>‘my fly’ (7)</td>
<td>ñ-túŋ è mì</td>
</tr>
<tr>
<td>ñ-gòm mì`</td>
<td>‘my drum’ (9)</td>
<td>ñ-gòm è mì</td>
</tr>
</tbody>
</table>

Otherwise Nzadi has dropped the noun class system in favor of singular/plural and human/non-human marking on noun phrase elements. As seen in (5), only pronouns, which are independent words, show full singular/plural and [±human] agreement. Demonstratives distinguish [±human] only in the plural, while only a subset of adjectives show singular-plural agreement (others are invariant):

<table>
<thead>
<tr>
<th></th>
<th>singular</th>
<th>plural</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>human</td>
<td>non-human</td>
</tr>
<tr>
<td></td>
<td>human</td>
<td>non-human</td>
</tr>
<tr>
<td>3rd person pronouns</td>
<td>ndé</td>
<td>nõ</td>
</tr>
<tr>
<td>demonstratives (e.g. ‘this’)</td>
<td>ná-pè</td>
<td>bá-pè</td>
</tr>
<tr>
<td>adjectives (some; e.g. ‘big’)</td>
<td>ò-nán</td>
<td>à-nán</td>
</tr>
<tr>
<td>adjectives (some; e.g. ‘bad’)</td>
<td></td>
<td>ò-bé</td>
</tr>
</tbody>
</table>

Crucial for the present study are the following two points: First, although main clauses have the standard Bantu Subject-Verb-Object structure, e.g.
Tùkùmù à mòn mwǎàn ‘Tukumu has seen the child’, there is no subject-verb agreement, as seen in (6).

(6) No subject-verb agreement in main clauses, which are SV(O)
   a. Present:
      mùùr é túl ‘a person is arriving’
      bààr é túl ‘people are arriving’
   b. Perfect:
      mùùr à túl ‘a person has arrived’
      bààr à túl ‘people have arrived’
   c. Past:
      mùùr ó túl ‘a person arrived’
      bààr ó túl ‘people arrived’

Second, pronouns are independent words and have the same shape, whether used as subject, object, or possessive. As seen in (7), the human plural pronouns have fused the PB class 2 prefix *ba-, while the non-human 3rd person pronouns have fused PB class 5 *li- (sg.) and class 6 *ma- (pl.) with the pronominal morpheme /-ɔ/.

(7) singular plural

| 1st person | mǐ` | bǐ |
| 2nd person | yǎ` | byɛ̀n |
| 3rd person [+human] | ñdé | bɔ̀ |
| 3rd person [−human] | nɔ̀ | mɔ̀ |

3. Non-subject relative clauses in Nzadi

With the above background on grammatical loss, we can now consider the most interesting grammatical innovation that we found in Nzadi: extension of the obligatory post-verbal expression of the subject in a non-subject relative clause (NSRC). In Bantu, as elsewhere, it is not uncommon to find postposing of the subject of a (non-subject) relative clause, as in (8a), a structure which is attested also in nearby languages, e.g. Sakata (Monse 1987: 104), Mbuun (Koen Bostoen, personal communication), Yansi (Tayeye 1985: 102, 107; Salikoko Mufwene, personal communication).

(8) a. mwàán (nà) (ŋg’) ò mòn ìkààr
   child (that) (which) past see woman
   ‘the child that the woman saw’

b. mwàáñ (nà) (ŋg’) ò mòn yá yè mǐ`
   child (that) (which) past see you and I
   ‘the child that you (sg.) and I saw’
In the above examples we note that both of the markers nà and ñg’ are optional, i.e. one, both or neither can appear in (8a, b). When both nà and ñg’ are absent, the resulting relative clause can sometimes be distinguished tonally from a main clause (cf. Section 5), while in other cases there is ambiguity. As exemplified in (9), nà otherwise marks a null head within the noun phrase (NP), while ñg’ appears in WH words (and has an elided vowel which is unrecoverable, since it is always followed by another vowel).

(9) a. nà mì’ ‘mine’ vs. mápê ‘these’
    nà ènân ‘big ones’
    nà ípê ‘second (one)’ (‘that of two’)

b. ñgê ‘which’
    ñgô ‘where’
    ñgà mbyé ‘how’

We thus interpret the sequence nà ñg’ as a pronominal + WH element, literally translatable as ‘that which, that whom’. We shall refer to NSRCs which have a postverbal subject NP as the VS construction.

Alongside the above VS relative clause structures in (8), we now observe in (10) that the subject noun can appear in preverbal position, as in main clauses, but only if an agreeing pronoun (e.g. ndé ‘he/him, she/her’, bɔ̌ ‘they/them’) co-occurs after the verb.

(10) a. mwàán (nà) òkáàr ó món ñdé
    child (that) woman PAST see she
    ‘the child that the woman saw’

b. mwàán (nà) âkáàr ó món bɔ̌
    child (that) women PAST see they
    ‘the child that the women saw’

c. mwàán (nà) yá yê mì’ ó món bì
    child (that) you and I PAST see we
    ‘the child that you (sg.) and I saw’

If there is no postverbal agreeing pronoun, the result is ungrammatical as in (11).

(11) a. *mwàán (nà) òkáàr ó món
    child (that) woman PAST see
    ‘the child that the woman saw’

b. *mwàán (nà) âkáàr ó món
    child (that) women PAST see
    ‘the child that the women saw’

c. *mwàán (nà) yá yê mì’ ó món
    child (that) you and I PAST see
    ‘the child that you (sg.) and I saw’
I shall refer to the construction in (10) as SVs, where $s$ refers to the pronoun which agrees with an overtly expressed preposed S. Although the sentences in (10) are indicated with only the optional pronominal nà, note in (12a) that the WH element ŋg’ is possible, but not preferred, in the SVs variant.

(12) a. mwàán (nà) àkáàr (ŋg’) ò món bɔ̀
child (that) women which PAST see they
’the child that the women saw’

d. *mwàán (nà) ŋg’ òkáàr ò món ñdé
child (that) which woman PAST see she
’the child that the woman saw’

The sentence in (12b) shows that in this case ŋg’ must occur between the subject and the tense marker.

The sentences in (13) show that when the subject is a simple (e.g. non-conjoined) pronoun, it must follow the verb.

(13) a. mwàán (nà) (ŋg’) ò món mǐ ‘the child that I saw’

c. mwàán (nà) (ŋg’) ò mén yà ‘the child that you (sg.) saw’

d. mwàán (nà) (ŋg’) ò món nǐ ‘the child that it saw’

e. mwàán (nà) (ŋg’) ò món bì ‘the child that we saw’

When there is no overt preposed subject NP agreeing with the post-verbal pronoun we shall refer to the construction as VS just as when the post-verbal NP is lexical. The examples in (14b–c) show that a simple pronoun cannot occur preverbally, whether there is a postverbal copy or not.

(14) a. mwàán (nà) (ŋg’) ò món bɔ̀
child (that) (which) PAST see they
’the child that they saw’

c. *mwàán (nà) bɔ̀ ò món bɔ̀
child (that) they PAST see they

That is, a simple pronoun cannot occur as S in an SV construction, nor can it occur as S in an SVs relative. An NSRC such as in (14c) is thus ungrammatical for two reasons: the subject is not expressed postverbally and a pronoun cannot occur preverbally.
While all of our examples thus far have involved relativization on a direct object, the same postverbal subject requirement is in effect in any NSRC. The examples in (15a, b) thus show the same VS and SVs structures when we relativize on the temporal noun èsúú ‘day’.

(15) a. èsúú (nà) (ŋg’) ò mòn əkáàr mwǎàn
day (that) (which) past see women child
‘the day that the women saw the child’
b. èsúú (nà) əkáàr ò mòn bɔ̃ mwǎàn
day (that) women past see they child
‘the day that the women saw the child’
c. *èsúú (nà) əkáàr ò mòn mwǎàn
day (that) women past see child

The ungrammaticality of (15c) again shows the obligatoriness of the VS structure. As before, a simple subject pronoun must occur after the verb, as in (16a), rather than before, as in (16b).

(16) a. èsúú (nà) (ŋg’) ò mòn bɔ̃ mwǎàn
day (that) (which) past see they child
‘the day that they saw the child’
b. *èsúú (nà) bɔ̀ ò mòn (bɔ̃) mwǎàn
day (that) they past see (they) child

Another property of both VS and SVs is that the postverbal subject must occur immediately after the verb (17).

(17) a. èsúú (nà) (ŋg’) ò sǔm əkáàr àkwɔ̀
day (that) (which) past buy women bananas
‘the day that the women bought bananas’
b. *èsúú (nà) (ŋg’) ò sǔm àkwɔ̀ əkáàr
day (that) (which) past buy bananas women
(lit. ‘the day that the bananas bought the women’)

Finally note in the examples in (18) that subject relative clauses (SRC) accept optional nà and ŋg’, but not a postverbal subject pronoun:

(18) a. əkáàr (nà) (ŋg’) ò mòn mwǎàn
women that which past see child
‘the women who saw the child’
b. *əkáàr (nà) (ŋg’) ò mòn bɔ̃ mwǎàn
women that which past see they child
4. Discussion

In Section 3 we saw that the subject of an NSRC must be overtly expressed after the verb, either in a SV or SVs construction. The most striking property is the coreferential $s$ in the SVs construction, which appears superficially to be a pronoun copy of the preverbal subject. Two questions immediately arise: (i) Why does Nzadi have an SVs construction? (ii) What can we relate the SVs construction to? From a surface point of view, the development of SVs looks like a case of Pullum’s (1976) “Duke of York” derivation ($A \rightarrow B \rightarrow A$), as in (19) (cf. Nsuka Nkutsi 1982: 78 for a corresponding diachronic proposal):

(19) $A = \text{preposed } S \quad B = \text{postposed } S \quad A = \text{preposed } S$

\[ \text{O (that) (which) } S \quad V \rightarrow \text{O (that) (which) } V \quad S \rightarrow \text{O (that) } S \text{ (which) } V \quad s \]

However, even though the postverbal pronoun appears to agree with the preverbal noun in SVs, the basic intuition is that the “real” subject in an NSRC is what follows the verb, i.e. VS, SVs. There are three arguments: (i) The postverbal subject is obligatory, whether VS or SVs. (ii) The postverbal subject is unrestricted unlike the preverbal subject, which cannot be a simple pronoun. (iii) Postverbal subjects in an NSRC are widespread, especially within Bantu (Meeussen 1971, Givón 1972, Bokamba 1976, Keach 1980, Nsuka Nkutsi 1982, Demuth & Harford 1999, Kawasha 2002, Henderson 2007, van der Wal 2010, among others). From a phrase-structure point of view, rather than conceptualizing the S to move to the right of the verb, the V would move up to the left of the S to produce VS in (20a). To derive SVs, the S would then have to move still higher, as in (20b), presumably leaving pronominal s as some kind of trace.1

(20)

\[ a. \quad \text{VS Structure} \quad b. \quad \text{SVs Structure} \]

\[ \begin{array}{c}
\text{ZP} \\
\downarrow \\
\text{Z} \\
\downarrow \\
\text{YP} \\
\downarrow \\
\text{X} \\
\downarrow \\
\text{S} \\
\downarrow \\
\text{V} \\
\end{array} \quad \begin{array}{c}
\text{ZP} \\
\downarrow \\
\text{Z} \\
\downarrow \\
\text{YP} \\
\downarrow \\
\text{X} \\
\downarrow \\
\text{S} \\
\downarrow \\
\text{V} \\
\end{array} \]

1. I am grateful to José Maria Lahoz, Masha Polinsky, and Lisa Cheng for extensive discussion of the syntactic issues involved and for more sophisticated proposals.
The problem with the syntactic account is that it is not clear what \( Z \) is. While it is tempting to view it as a topic position, there is no (known) pragmatic distinction between VS and SVs. For example, the question \( \text{ìkwò ŋgè ò dzé yâ} \) ‘which banana did you eat?’ can be answered with either structure in (21).

\[
\text{(21) a. VS: } \ (\text{ìkwò}) \ nà \ ó \ súm \ òkáàr \\
\text{b. SVs: } \ (\text{ìkwò}) \ nà \ òkáàr \ ó \ súm \ údè}
\]

‘the banana/the one that the woman bought’

In addition, all four logical combinations of VS and SVs can be used to contrast the subject of the relative clause, where the word by word glossing refers to (22d).

\[
\text{(22) a. VS + VS: } \ \text{wèć fufú nà ò súm ákáàr, sàŋ òwèć fufú nà ò súm ábàà} \\
\text{b. SVs + SVs: } \ \text{wèć fufú nà òkáàr ó súm bò, sàŋ òwèć fufú nà ábàà ósúm bò} \\
\text{c. VS + SVs: } \ \text{wèć fufú nà ò súm ákáàr, sàŋ òwèć fufú nà ábàà ósúm bò} \\
\text{d. SVs + VS: } \ \text{wèć fufú nà òkáàr ó súm bò, sàŋ òwèć fufú nà ò súm ábàà}
\]

‘take fufu that women PAST buy they, not take fufu that PAST bought men

‘take the fufu that the WOMEN bought, not the fufu that the MEN bought!’

It seems therefore unlikely that a pragmatic distinction will be found between the two structures.

It should be noted that neither VS nor SVs is found in main clauses. Thus, the canonical SVO main clause structure in (23a) cannot be alternatively expressed with SVs in (23b):

\[
\text{(23) a. SVO: } \ \text{mwàán ò mòn àkáàr} \\
\text{child PAST see women} \\
\text{‘the child saw the women’} \\
\text{b. SVsO: } *\text{mwàán ò mòn ndé àkáàr} \\
\text{child PAST see he women}
\]

In addition, the VS of NSRCs is unrelated to locative inversion, as in (23a), since locative inversion requires the subject to be new information:

\[
\text{(23) a. kò ndzò ò kót bààr ípè} \\
\text{at house PAST enter people two} \\
\text{‘into the house entered two people’}
\]
Thus, unlike NSRCs, the pronominal subject makes the sentence in (23b) ungrammatical. The ungrammaticality of (23c) shows that locative inversion requires an intransitive verb, again unlike NSRCs.

Finally, VS is unrelated to main clause subject-object inversion common in Bantu (e.g. Bokamba 1979, Kimenyi 1980):

(24) a. mwàán ↓ó táŋ òŋkàán
   child past read book
   ‘the child read the book’

b. òŋkààn ó táŋ mwàán
   book past read child
   ‘the child read the book’ (lit. ‘the book read the child’)

c. *òŋkààn ó táŋ ǹdé
   book past read he
   ‘he read the book’ (lit. ‘the book read him’)

As seen, the unmarked order in (24a) can be inverted in (24b) with the same meaning. What cannot be done, however, is to invert with a pronoun, as in (24c). Thus, both locative inversion and subject-object inversion, which occur in main clauses, do not seem related to the VS or SVs structures found in NSRCs. In the next section we expand on the contexts in which VS and SVs occur.

5. Additional occurrences of VS/SVs

In Section 3 and Section 4 we established the following: (i) SVs is prohibited in main clauses (MC) and subject relative clauses (SRC); (ii) SV is prohibited in NSRCs (which must be VS or SVs); (iii) a VS/SVs subject must immediately follow the verb; (iv) the S of SVs cannot be a pronoun. Thus far we have illustrated NSRCs occurring when either an object or a temporal is relativized. In this section we will see that the same structures occur more widely, showing that other clauses either are themselves underlying NSRCs or at least share properties with them.

The first new context involves temporal clauses which lack a relativized head or other marker. As seen in (25), aside from tone, temporal VS contrasts only in word order with main clause SV(O).
Post-verbal subject in the Nzadi relative clause

(25) a. main clause (SV)
   bɔ̀ á yà ‘they come’
   they  HAB  come
   bààr á yà ‘people come’

b. temporal clause (VS/SVs)
   á ↓yà bɔ̀ ‘when they come’
   HAB  come  they
   á ↓yà bààr ‘when people come’
   bààr á ↓yà bɔ̀

The structures in (25b) are quite common, especially in narratives, as seen in (26) which are excerpts from two different texts. The post-verbal subjects are underlined:

(26) a. á fùp yǎ nɔ̀ kó tsyà, yǎ à lûm mpwè
   HAB  grill  you  it  on  fire  you  HAB  remove  skin
   é nɔ̀.
   After you grill it on the fire, you remove its skin.
   à lûm ↓yà mpwè é nɔ̀, yǎ kér ibvè.
   HAB  remove  you  skin  of  it  you  make  wrapping
   After you remove its skin, you make a wrapping.

b. á kὲ bɔ̀ ndzéé, bɔ̀ á kér kisál ↓kó
   HAB  go  they  river  they  HAB  do  work  at
   ndzéè . . .
   river . . .
   When they go to the river, they work at the river . . .
   á yà bɔ̀, bɔ̀ á kútàn yè bààr óbyè.
   HAB  come  they  they  HAB  meet  with  people  many
   When they come, they meet with many people.

As indicated in (26), such unmarked temporals seem sometimes best translated with ‘when’, other times with ‘after’. A logical hypothesis is that there once was a head noun such as ntàn ‘time’ and that such structures derive historically from an NSRC whose head has been deleted.

In (27) we observe that the VS/SVs structures are optional in non-subject WH questions:

(27)

\[ SV (= \text{main clause}) \quad VS (\sim \text{SVs}) \]
\[ a. \ nɛ̀ bààr ó môn nɛ̀ ó môn bààr \]
   who  people  PAST  see  who  PAST  see  people
   nɛ̀ bààr ó môn bɔ̀
   who  people  PAST  see  they

‘who did the people see?’
There thus are three equivalent ways of saying ‘who did the people see?’ and two ways to say ‘who did they see?’. The same is observed with ōngér ŋgè ‘what’ (lit. ‘which thing’) in (28).

(28)  
\[ SV (= \text{main clause}) \quad VS (~ SVs) \]

a. ōngér ŋgè bà ār ó wēē ōngér ŋgè ó wēē bà ār  
thing which people  \text{PAST} \ choose  
‘what did the people choose?’  
ōngér ŋgè bà ār ó wēē bō  
thing which people  \text{PAST} \ choose they  
‘what did they choose?’

b. ōngér ŋgè bō ó wēē ōngér ŋgè ó wēē bō  
thing which they  \text{PAST} \ choose  
‘what did they choose?’

 Besides the different word orders, there is an important tonal difference seen on the verb. As indicated in (29), both H and L tone verbs are assigned a HL tonal pattern in the main clause past tense (marked by the proclitic /ō/):

(29)  
\[ \text{underlying verb tone} \quad \text{MC} /ő/ \text{PAST} \quad \text{NSRC} /ő/ \text{PAST} \]

a. /H/ /mōn/ ‘see’  
\text{HL} [mōn]  \text{H} [mōn]  
b. /L/ /wēē/ ‘choose’  
\text{HL} [wēē]  \text{LH} [wēē]

On the other hand, the corresponding NSRC forms suggest that a /H/ grammatical tone occurs between the verb and the subject, thereby converting /L/ verbs to LH, but having no effect on /H/ verbs. In other words the main- vs. non-main clauses in question not only differ in word order, but also in tone.

As seen in the forms in (30) the tonal differences potentially differentiate between subject- and non-subject relative clauses:

(30)  
\[ /mōn/ \ ‘see’ \quad /wēē/ \ ‘choose’ \]

\text{MC:}  
bā ār ó mōn mā ān  
bā ār ó wēē mā ān  
‘the people saw/chose the wine’

\text{SRC:}  
bā ār ó mōn mā ān  
bā ār ó wēē mā ān  
‘the people who saw/chose the wine’

\text{NSRC:}  
mā ān ó mōn bā ār  
mā ān ő wēē bā ār  
mā ān ó wēē bā ār  
/mōn + ‘ + bā ār/  
/wēē + ‘ + bā ār/  
‘the wine that the people saw/chose’

While the same HL tone pattern appears on both verbs in the MC and SRC, the grammatical H tone is observed in the NSRCs. Interestingly, this H can option-
ally go onto the subject noun /bààr/ ‘people’, converting it to HL [báàr]. (The verb wὲὲ is in this case realized L.) The tonal morpheme shown in the last line of (30) may thus be better interpreted as a clitic rather than a suffix.

The tonal difference is a potentially significant discovery from a comparative Bantu point of view. While most Bantu languages have obscured the original tones, there are languages such as Haya in which NSRCs show similar evidence of a H suffixal tone (Hyman & Byarushengo 1984: 101). Thus compare the tones of the SRC and NSRC schemas in (31).

(31)

<table>
<thead>
<tr>
<th></th>
<th>SRC</th>
<th>NSRC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Habitual</td>
<td>a-ba-R-a</td>
<td>ba-R-a</td>
</tr>
<tr>
<td></td>
<td>a- ‘augment’, ba- ‘they’ (cl.2)</td>
<td></td>
</tr>
<tr>
<td>Today Past</td>
<td>a-ba-a-R-a</td>
<td>ba-a-R-a</td>
</tr>
<tr>
<td></td>
<td>-a- ‘tense marker’, -a ‘inflectional</td>
<td></td>
</tr>
<tr>
<td>Yesterday Past</td>
<td>a-ba-R-ile</td>
<td>ba-R-ile</td>
</tr>
<tr>
<td></td>
<td>-ile ‘perfective ending’</td>
<td></td>
</tr>
</tbody>
</table>

As seen, the SRC schemas end in a toneless inflectional /-a/ while the NSRC schemas end in a H tone /-/ (which in turn causes any preceding H tones to delete). Could the H of NSRCs in Haya be a trace of a postverbal relative marker or pronoun, i.e. perhaps an older *SVs?

Continuing with this comparative Bantu perspective, one is reminded of the so-called Law of Initials and Finals, whereby certain verb forms end H if the subject prefix is /H/ but L if the subject prefix is /L/. Examples of this rather unusual tonal agreement are often found in NSRCs. The following interesting examples come from Konda, where the normal subject prefix instead agrees with the relativized object (Nsuka Nkutsi 1982: 189):

(32) a. bont’ o-lang-a mí ‘the person that I like’
    b. banto bá-lang-á mí ‘the people that I like’

As seen in (32a), when the prefix is o-, there is no H tone on the final -a. However, in (32b), where the prefix is bá-, the final vowel appears as -á. For this to be the case, there must have been another morpheme occurring between the verb and the post-posed subject (cf. Section 6). As Meeussen (1971: 10) recognized some time ago, such apparent long-distance tonal agreement represents a case of loss of a post-verbal grammatical morpheme:

“... the same analysis and interpretation now offers itself for a number of other Bantu languages, as also for Proto-Bantu: instead of tonal harmony at a distance, there is a repetition of the initial morpheme at the end of the word, but in such a way that it is reduced to mere [high] tone — except if this repetition is propped up by a pronominal (-e) or anaphoric (-o) support, as in Swahili. . . ."
While Konda has significantly restructured whatever was the proto situation (presumably, regular subject-verb prefix agreement + a post-verbal relativizer or enclitic pronoun), the Nzadi H grammatical tone seems an important element in the historical reconstruction of NSRCs in that language as well.

What would be most helpful all around would be a study of the exact distribution of VS/SVs in Nzadi, which necessitates a thorough-going search throughout the grammar. In the remainder of this section I present the information that we have at present. To begin, contrasting with (27) and (28), where a post-verbal subject was optional in non-subject WH questions, VS/SVs is required in non-subject embedded questions:

\[(33)\]
\begin{enumerate}
  \item \textit{mì ô yúp mùùr ô kpê}
  I \textsc{past} ask person \textsc{past} die
  \hfill ‘I asked who died’ (lit. ‘the person who died’) (= SRC)
  \item \textit{mì ô yúp mùùr ô mɒ ́n bɔ́}
  I \textsc{past} ask person \textsc{past} see they
  \hfill ‘I asked who they saw’ (lit. ‘the person they saw’) (= NSRC)
  \item \textit{mì ô yúp òŋgér ô dzé bɔ́}
  I \textsc{past} ask thing \textsc{past} eat they
  \hfill ‘I asked what they ate’ (lit. ‘the thing they ate’) (= NSRC)
\end{enumerate}

As seen from the glosses, we can assume this is because these structures are NSRCs. The same is observed in condition clauses in (34) which are VS/SVs only if embedded.

\[(34)\]
\begin{enumerate}
  \item \textit{kèr mwàán ő dzé ìkwɔ̀}
  if child \textsc{past} eat banana
  \hfill ‘if the child ate/had eaten the banana . . .’
  \item \textit{mì ô yúb kèr mwàán ő dzé ndé ìkwɔ̀}
  I \textsc{past} ask if child \textsc{past} eat he banana
  \hfill ‘I asked if the child ate the banana’
\end{enumerate}

In this case the same marker \textit{kèr ‘if’} is used, which is not obviously a relativized head noun (cf. the related preposition \textit{kèr ‘like’}, both possibly derived from the verb \textit{kèr ‘do, make’}). Similarly, dependent clauses marked by \textit{sâm ‘reason’} are SV with the meaning ‘because’, but VS/SVs as indirect questions:

\[(35)\]
\begin{enumerate}
  \item \textit{bɔ̀ ô lúm sâm bɔ̀ ô kí yὲ tndzàà}
  they \textsc{past} leave reason they \textsc{past} be with hunger
  \hfill ‘they left because they were hungry’
  \item \textit{mì ô yúp sâm ñgê ô lúm bɔ́}
  I \textsc{past} ask reason which \textsc{past} leave they
  \hfill ‘I asked why they left’
\end{enumerate}
While VS/SVs seems to occur in headed subordinations, note that subjunctive (SBJN) clauses are SV, even if embedded in an NSRC:

(36) a. ndzìì nà mì à líŋ ñdé kó mpfúr mì`
   money that I PRES want he SBJN me pay me
   ‘the money that I want him to pay me’

b. mì ó tyén yè mwàán (ningé) ñdé ké lúm
   I PAST say to child (that) he SBJN leave
   ‘I told the child to leave’ (*ké lúm ñdé)

c. ōngér ñgé ó tyén yā yè mwàán (ninge) ñdé ké dzé
   thing which PAST say you to child (that) he SBJN eat
   ‘what did you tell the child to eat?’

Similarly, assertive complement clauses which use the complementizer ningé ‘that’ are SV, as in (37a), even if embedded in an NSRC, as in (37b).

(37) a. yà ó tyén (ningé) yā ó pé Tùkúmù ñkóp
   you PAST say (that) you PAST give Tukumu cup
   ‘you said you gave Tukumu the cup’ (*ó pé yā’)

b. ñkóp nà ó tyén yā (ningé) yā ó pé Tùkúmù
   cup that PAST say you (that) you PAST give Tukumu
   ‘the cup you said you gave to Tukumu’ (*ó pé yā’)

c. ñkóp nà ó tyén yā nà ó pé yā Tùkúmù
   cup that PAST say you that PAST give you Tukumu
   ‘the cup you said you gave to Tukumu’

However, one can alternatively string NSRCs, as in (37c), which is best translated as ‘the cup (the one) that you said, (the one) that you gave to Tukumu’. Similar possibilities are observed with a WH element in (38).

(38) a. ōngér ñgé ó tyén bɔ̌ kókáár ningé mì ó dzé
   thing which PAST say they to woma that I PAST eat
   ‘what did they tell the woman that I ate?’ (SV)

b. ōngér ñgé ó tyén bɔ̌ kókáár (nà) ó dzé mì`
   thing which PAST say they to woman (that) PAST eat I
   ‘what did they tell the woman that I ate?’ (VS)

c. ōngér ñgé (nà) ó dzé mì ó tyén bɔ̌ kókáár
   thing which (that) PAST eat I PAST say they to woman
   ‘what that I ate did they tell the woman?’
   Lit. ‘which thing (that) I ate did they tell the woman?’

While (38a) has a true assertive clause embedded within a WH question, (38b) is best translated as ‘what did they tell the woman, that which I ate?’, with a headless relative clause. Evidence for this interpretation is seen from the fact
that (38c) is grammatical, with the literal meaning, ‘which thing (that) I ate did they tell the woman?’

In (39) we see that the relativized noun of an NSRC can be a pronoun or proper name, restrictive or non-restrictive:

(39) a. bî (nà) Tûkûmû ò mûn ãndé à mûn kó ndzô
we (that) Tukumu past see he pres be at house
‘we whom Tukumu saw are in the house’

b. bî (nà) (nâg’) ò mûn Tûkûmû à mûn kó ndzô
we (that) (which) past see Tukumu pres be at house
‘we whom Tukumu saw are in the house’

c. Tûkûmû, (nà) (nâg’) ò mûn bõ, à mûn kó
Tukumu (that) (which) past see they pres be at
ndzô
house
‘Tukumu, whom they saw, is in the house’

The above completes the survey of the contexts which require or allow the VS/SVs construction. We turn now to consider two puzzles which still remain. The first concerns the fact that the S of VS can optionally occur after a main verb + infinitive. This is seen in the pairs of examples in (40).

(40) a. àkwɔ̀ nà ò yé bɔ̀ òmpá mî
bananas that past come they to.me.give me
‘the bananas that they came to give me’

b. àkwɔ̀ nà ò yé òmpá bɔ̀ mî
bananas that past come to.me.give they me
‘the bananas that they came to give me’

c. mbyɛ̀ nà ò wɛ̀ ãndé õpiŋ õtsûr
knife that past take s/he to.cut meat
‘the knife that s/he took to cut the meat’

d. mbyɛ̀ nà ò wɛ̀ õpiŋ ãndé õtsûr
knife that past take to.cut s/he meat
‘the knife that s/he took to cut the meat’

While it is not unusual for closely related verb combinations to be restructured and function as a single constituent, it is perhaps surprising that the subject may not appear post-verbally after an auxiliary + verb sequence. Thus, (41b) and (41d) are ungrammatical:

(41) a. fûfû nà ò ŋkâŋ 侵犯 侵犯 mî õdzà
fufu that past just I to.eat
‘the fufu that I have just eaten’

b. *fûfû nà ò ŋkâŋ õdzà mî
fufu that past just to.eat I
c. ̀fùfù nà ó tún mí ̀odzá
    fufu that PAST refuse I to.eat
    ‘the fufu that I did not eat’ (lit. ‘that I refused to eat’)

d. *fùfù nà ó tún ̀odzá mǐ’
    fufu that PAST refuse to.eat I

This is all the more surprising as the verb form which follows the auxiliaries is in the infinitive form. (Note in (41c) that negative marking cannot occur in relative clauses; see Crane, Hyman & Tukumu, (2011))

The second puzzle is even more intriguing: It is not possible to use the VS construction if the clause has a noun subject and a pronoun object. As seen in the following examples, (42a) and (42b) are grammatical with both the subject and object being nouns or pronouns, respectively:

(42) a. N+N
    ̀èsúú nà ó món ̀okáár bàân
    day that PAST see woman children
    ‘the day that the woman saw the children’

b. pron+pron
    ̀èsúú nà ó mòn ̀né dé bõ
    day that PAST see she them
    ‘the day that she saw them’

c. pron+N
    ̀èsúú nà ó mòn ̀né dé bààn
    day that PAST see she children
    ‘the day that she saw the children’

d. N+pron
    *̀èsúú nà ó món ̀okáár bõ
    day that PAST see woman them
    ‘the day that the woman saw them’

e. SVs
    ̀èsúú nà ̀okáár ó mòn ̀né dé bõ
    day that woman PAST see she them
    ‘the day that the woman saw them’

Also acceptable in (42c) is a clause where the subject is a pronoun and the object a noun. What is ungrammatical is (42d), where a subject noun is followed by a pronoun object. Instead, the SVs alternate in (42e) has to be used, in which case both the post-verbal subject and the object are both pronouns (cf. (42b)). Note that there is nothing wrong with a lexical NP being followed by a pronominal NP in other syntactic structures, e.g. when both are objects in the double object construction in (43).
(43)  a.  N+N
    òkáár ó mwé mwǎan ọ̣ŋkǎan
    woman past show child book
    ‘the woman showed the child the book’

    b.  pron+pron
    òkáár ó mwé ndé nɔ̌
    woman past show him it
    ‘the woman showed him it’

    c.  pron+N
    òkáár ó mwé ndé ọ̣ŋkǎan
    woman past show him book
    ‘the woman showed him the book’

    d.  N+pron
    òkáár ó mwé mwǎan nɔ̌
    woman past show child it
    ‘the woman showed the child it’

Although we see no grammatical or pragmatic reason why (42d) should be ungrammatical, many other such examples were elicited with the same result. We can wonder if the ungrammaticality of a postverbal subject noun + pronominal object is related to the ungrammaticality of a preverbal pronoun in SVs — and, in turn, whether the ungrammaticality of a preverbal pronoun might be related to the absence of (main clause) subject-verb agreement (cf. (6) above). At this stage of our knowledge, we will unfortunately have to leave both of these issues a mystery.

6.  Conclusion: A wider Bantu perspective

The above summarizes the basic properties of the VS/SVs construction as presently understood. As I have pointed out, it is not surprising to find VS word order in NSRCs, as this occurs widely within Bantu and beyond. What is worthy of note is the SVs structure wherein a post-verbal pronominal copy recapitulates the full noun phrase in pre-verbal position — where a simple pronoun cannot occur. In this section I’d like to briefly discuss two parallel constructions to Nzadi SVs in other Bantu languages.

To begin, Nzadi SVs is reminiscent of VS possessive pronominal subjects in P.30 Bantu, e.g. Lomwe. In the NSRC in (44), cited from Nsuka Nkutsi (1982: 72–73), there is both a prefix mu- and a suffix -anyu marking the 2nd person plural subject:

(44) mutchu owo mu-hi-na-mu-suwel-anyu
    man that you.pl.-neg-tm-him-know-your.pl
    ‘the man that you do not know’  (tm = tense marker)
While the subject of the relative clause is marked both by the subject prefix and the possessive pronoun, the subject prefix of the NSRC instead agrees with the relativized noun in Makhua (recall Konda in (32)). The following NSRC is from van der Wal (2010):

(45)  ekamisá e-pasar-aly-áaka
      shirt  it[cl.9]-iron-perf.rel-my
      ‘the shirt that I ironed’

Since it appears to have the structure ‘the shirt that ironed my’, van der Wal proposes that the NSRC is a “participial modifier”. As pointed out with respect to the paradigm in (7), Nzadi, unlike canonical Bantu, has a single set of forms which serve in pronominal functions. There is in fact no evidence that VS pronouns are possessives, e.g. they cannot be preceded by the connective /é/ seen in (4). Nsuka Nkutsi provides possible historical scenarios for the development of subject-marking VS possessive pronouns, which often resemble independent pronouns (“substitutifs”) in Bantu (Kamba Muzenga 2003).

The second parallel within Bantu is slightly better established, but equally exotic. A number of Bantu languages repeat the subject pronominally in a negative clause (Nsuka Nkutsi 1982: 74–76; Devos & van der Auwera 2009). This is seen in the following affirmative/negative pairs in the Tanzanian Bantu language Gweno (Philipsson 1993):

(48)  

<table>
<thead>
<tr>
<th></th>
<th>affirmative</th>
<th>negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>ni-le-m-bón-ire</td>
<td>ní-le-m-bón-ire pi</td>
<td>‘I saw/didn’t see him’</td>
</tr>
<tr>
<td>kú-le-m-bón-ire</td>
<td>kú-le-m-bón-ire pfó</td>
<td>‘you sg. saw/didn’t see him’</td>
</tr>
<tr>
<td>á-le-m-bón-ire</td>
<td>á-le-m-bón-ire wé</td>
<td>‘s/he saw/didn’t see him’</td>
</tr>
<tr>
<td>fú-le-m-bón-ire</td>
<td>fú-le-m-bón-ire fwé</td>
<td>‘we saw/didn’t see him’</td>
</tr>
<tr>
<td>mí-le-m-bón-ire</td>
<td>mí-le-m-bón-ire mwé</td>
<td>‘you pl. saw/didn’t see him’</td>
</tr>
<tr>
<td>βá-le-m-bón-ire</td>
<td>βá-le-m-bón-ire bó</td>
<td>‘they saw/didn’t see him’</td>
</tr>
<tr>
<td>sm-tm-him-see-tm</td>
<td>sm1-tm-him-see-tm pro1</td>
<td>(sm = subject marker)</td>
</tr>
</tbody>
</table>

Such recapitulative postverbal subject markers have, according to their morphology, been variously identified as possessive, independent, demonstrative, or reflexive/logophoric pronouns also in Grassfields Bantu languages, where such negative structures have been reported as well (Asongwed 1980, Watters 2003: 251, Leroy 2003: 329–330, Mihas 2009). In the following Ngemba forms (Leroy 2007: 274) I have removed the final enunciative markers which were included in some of the examples:

(49)  

a.   i’ká mà búʔó yê  ‘I did not clear’ (land)
    b.   i’ká ø búʔó yô  ‘you (sg.) did not clear’


The question is whether there is any link between the (possibly possessive) pronouns which recapitulate the subject in Nzadi, Lomwe and Makua, and what has been reported to occur in negative constructions both within Narrow Bantu and Grassfields Bantu. Perhaps if we understood post-verbal recapitulative subject pronouns in either the NSRC or in negatives we would have the answer to other. It is hoped that work currently in progress on other understudied Bantu languages will shed light on both.

References


Post-Verbal subject in the Nzadi relative clause
