Post-Verbal subject
in the Nzadi relative clause

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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 relatif 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 Makhuwa, 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 An unpublished word list of Nico Burssens' had apparently been the only linguistic investigation of the language.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.

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(2) PB ***mɔ̀-jánà** > **mwǎàn** 'child'
     PB ***bɔ̀-játò** > **wǎàr** 'canoe'
     PB ***lɔ̀-bókò** > **lwǒ`** 'arm, hand'

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)', **ɔ̀-káàr** 'woman', **à-káàr** 'women', **ǹ-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) *PB* *singular*   *plural* *PB*
     1, 3 ɔ̀- ——————————— è- 4 (noun prefixes)
     5 ì- ———————————— à- 2, 6
     7 è- ———————————— N- 10
     9 N-

(4) **ɔ̀-lúm mǐ`** 'my husband' (1)   **à-lúm é bǐ** 'our husbands' (2)
     ɔ̀-sìm è mî 'my rope' (3)   **è-sìm è mî** 'my ropes' (4)
     ì-kɔ̀ŋ è mî 'my spear' (5)   **à-kɔ̀ŋ è mî** 'my spears' (6)
     è-túŋ é mî 'my fly' (7)   **ǹ-túŋ é mî** 'my flies' (10)
     ŋ̀-gɔ̀m mǐ` 'my drum' (9)   **ŋ̀-gɔ̀m è mî** 'my drums' (10)

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):

(5)

	singular		plural	
	human	*non-human*	*human*	*non-human*
3rd person pronouns	**ndé**	**nǒ**	**bǒ**	**mǒ**
demonstratives (e.g. 'this')	**ná-pɛ̀**		**bá-pɛ̀**	**má-pɛ̀**
adjectives (some; e.g. 'big')	**ɔ̀-nân**		**à-nân**	
adjectives (some; e.g. 'bad')	**ɔ̀-bé**			

Crucial for the present study are the following two points: First, although main clauses have the standard Bantu Subject-Verb-Object structure, e.g.

Tùkúmù â mɔ́n 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 â tûl   'a person has arrived'   **bààr â tûl**   '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 ***lɪ-** (sg.) and class 6 ***ma-** (pl.) with the pronominal morpheme **/-ɔ́/**.

(7)

	singular	*plural*
1st person	**mǐ`**	**bǐ**
2nd person	**yǎ`**	**byěn**
3rd person [+human]	**ǹdé**	**bɔ̌**
3rd person [−human]	**nɔ̌**	**mɔ̌**

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   mɔ́n   òkáàr**
        child   (that)   (which)   PAST   see   woman
        'the child that the woman saw'
    b.   **mwàán   (nà)   (ŋg')   ò   mɔ́n   yǎ   yɛ̀   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 **ŋg'** are optional, i.e. one, both or neither can appear in (8a, b). When both **nà** and **ŋg'** 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 **ŋg'** appears in WH words (and has an elided vowel which is unrecoverable, since it is always followed by another vowel).

(9) a. **nà mǐ`**   'mine'   *vs.* **mápɛ̀** 'these'
        nà ènân 'big ones'
        nà ípè 'second (one)' ('that of two')
    b. **ŋgè**   'which'
        ŋgò   'where'
        ŋgà mbyɛ́ 'how'

We thus interpret the sequence **nà ŋg'** 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 ò   mɔ́n ńdé**
         child   (that) woman PAST see   she
         'the child that the woman saw'
    b. **mwàán (nà) àkáàr ò   mɔ́n bɔ̌**
         child   (that) women PAST see   they
         'the child that the women saw'
    c. **mwàán (nà) yǎ yɛ̀ mǐ` ò   mɔ́n bǐ**
         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 ò   mɔ́n**
         child   (that) woman PAST see
         'the child that the woman saw'
    b. ***mwàán (nà) àkáàr ò   mɔ́n**
         child   (that) women PAST see
         'the child that the women saw'
    c. ***mwàán (nà) yǎ yɛ̀ mǐ ò   mɔ́n**
         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 mɔ́n bɔ̌**
          child   (that) women which PAST see they
          'the child that the women saw'
      b. ***mwàán (nà) ŋg' òkáàr ò mɔ́n ńdé**
          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 mɔ́n mǐ`**   'the child that I saw'
b. **mwàán (nà) (ŋg') ò mɔ́n yǎ`**   'the child that you (sg.) saw'
c. **mwàán (nà) (ŋg') ò mɔ́n ńdé**   'the child that s/he saw'
d. **mwàán (nà) (ŋg') ò mɔ́n nǒ**   'the child that it saw'
e. **mwàán (nà) (ŋg') ò mɔ́n bǐ**   'the child that we saw'
f. **mwàán (nà) (ŋg') ò mɔ́n byěn**   'the child that you (pl.) saw'
g. **mwàán (nà) (ŋg') ò mɔ́n bɔ̌**   'the child that they [+human] saw'
h. **mwàán (nà) (ŋg') ò mɔ́n mɔ̌**   'the child that they [−human] 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 mɔ́n bɔ̌**
          child   (that) (which) PAST see they
          'the child that they saw'
      b. ***mwàán (nà) bɔ̀ ò mɔ́n bɔ̌**
          child   (that) they PAST see they
      c. ***mwàán (nà) bɔ̀ ò mɔ̂n**
          child   (that) they PAST see

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** **mɔ́n** **àkáár** **mwǎàn**
          day   (that)   (which)   PAST   see   women   child
          'the day that the women saw the child'

      b. **èsúú** **(nà)** **àkáár** **ò** **mɔ́n** **bɔ̌** **mwǎàn**
          day   (that)   women   PAST   see   they   child
          'the day that the women saw the child'

      c. ***èsúú** **(nà)** **àkáár** **ò** **mɔ́n** **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** **mɔ́n** **bɔ̌** **mwǎàn**
          day   (that)   (which)   PAST   see   they   child
          'the day that they saw the child'

      b. ***èsúú** **(nà)** **bɔ̀** **ò** **mɔ́n** **(bɔ̌)** **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** **súm** **àkáár** **àkwɔ̀**
          day   (that)   (which)   PAST   buy   women   bananas
          'the day that the women bought bananas'

      b. ***èsúú** **(nà)** **(ŋg')** **ò** **súm** **ákwɔ̀** **àkáàr**
          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. **àkáár** **(nà)** **(ŋg')** **ò** **mɔ́n** **mwàân**
          women   that   which   PAST   see   child
          'the women who saw the child'

      b. ***àkáár** **(nà)** **(ŋg')** **ò** **mɔ́n** **bɔ̌** **mwàân**
   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 → B → A), as in (19) (cf. Nsuka Nkutsi 1982: 78 for a corresponding diachronic proposal):

(19)   *A = preposed S*   *B = postposed S*   *A = preposed S*
        O (that) (which) S V → O (that) (which) V S → O (that) S (which) V 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. V<u>S</u>, SV<u>s</u>. 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.   *VS Structure*   b.   *SVs Structure*

_____
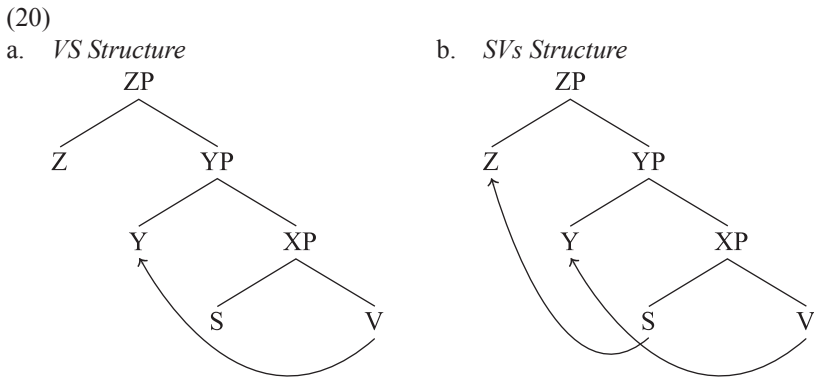
1. I am grateful to José Maria Lahoz, Masha Polinsky, and Lisa Cheng for extensive discussion of the syntactic issues involved and for more sophisticated proposals.

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 **ìkwɔ̀ ŋgè ò dzé yâ** 'which banana did you eat?' can be answered with either structure in (21).

(21) a. VS: **(ìkwɔ̀) nà ò súm òkáàr**
     b. SVs: **(ìkwɔ̀) nà òkáár ò súm ńdé**
            '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).

(22) a. VS + VS: **wɛ̀ɛ́ fùfú nà ò súm àkáár, sáŋ òwɛ̀ɛ̀ fùfú nà ò súm ábàà**
     b. SVs + SVs: **wɛ̀ɛ́ fùfú nà àkáár ò súm bɔ̌, sáŋ òwɛ̀ɛ̀ fùfú nà àbàà òsúm bɔ̌**
     c. VS + SVs: **wɛ̀ɛ́ fùfú nà ò súm àkáár, sáŋ òwɛ̀ɛ̀ fùfú nà àbàà òsúm bɔ̌**
     d. SVs + VS: **wɛ̀ɛ́ fùfú nà àkáár ò súm bɔ̌, sáŋ òwɛ̀ɛ̀ fùfú 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):

(22) a. SVO: **mwàán ò mɔ́n àkáàr**
            child PAST see women
            'the child saw the women'
     b. SVsO: ***mwàán ò mɔ́n ndé àkáàr**
            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:

(23) a. **kó ndzò ò kɔ́t bààr ípè**
            at house PAST enter people two
            'into the house entered two people'

b. ***kó   ndzò   ò   kɔ́t   bɔ̌**
    in   house   PAST   enter   they
    'into the house entered they'

c. ***kó   ndzò   ò   dzé   mwàán   fùfú**
    in   house   PAST   eat   child   fufu
    'in the house ate the child fufu'

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   mwàân**
            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).

(25)   a.   *main clause (SV)*

        bɔ̀   **á**   **yà**   'they come'
        they   HAB   come
        bààr á yà   'people come'

     b.   *temporal clause (VS/SVs)*

        á   **↓yá**   **bɔ̌** 'when they come'
        HAB   come   they
        á   **↓yá**   **bààr**   'when people come'
        bààr á ↓yá bɔ̌

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**   <u>**yǎ**</u>   **nɔ̀**   **kó**   **tsyà,**   **yǎ**   **à**   **lûm**   **mpwè**
        HAB   grill   you   it   on   fire   you   HAB   remove   skin
        é   **nɔ̌.**
        of   it
        After you grill it on the fire, you remove its skin.
        à   **lúm**   **↓<u>yá</u>**   **m̀pwè**   **é**   **nɔ̌,**   **yǎ**   **kèr**   **ìbvyê.**
        HAB   remove   you   skin   of   it   you   make   wrapping
        After you remove its skin, you make a wrapping.

     b.   **á**   **kɛ̀**   <u>**bɔ̀**</u>   **ndzéé,**   **bɔ̌**   **á**   **kèr**   **kìsál**   **↓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**   <u>**bɔ̀,**</u>   **bɔ̀**   **à**   **kútàn**   **yɛ̀**   **bààr**   **òbyê.**
        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 **ntâŋ** '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 (= main clause)   *VS (~ SVs)*

a. **nɛ̌**   **bààr**   **ó**   **mɔ̂n**   **nɛ̌**   **ò**   **mɔ́n**   **báàr**
   who   people   PAST   see   who   PAST   see   people
                                nɛ̌   **bààr**   **ò**   **mɔ́n**   **bɔ̌**
                                who   people   PAST   see   they
   'who did the people see?'

b. **nɛ̌ bɔ̀ ó mɔ̂n   nɛ̌ ò mɔ́n bɔ̌**
  who they PAST see   who PAST see they
  'who did they 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 **òŋgér ŋgè** 'what' (lit. 'which thing') in (28).

(28)

    SV (= main clause)   *VS (~ SVs)*

a. **òŋgér ŋgè bààr ó wɛ̂ɛ̀**   **òŋgér ŋgè ó wɛ̀ɛ́ bààr**
  thing which people PAST choose   thing which PAST choose people
  'what did the people choose?'   'what did the people choose?'

                                  òŋgér ŋgè bààr ó wɛ̀ɛ́ bɔ̌
                                    thing which people PAST choose they
                                    'what did the people choose?'

b. **òŋgér ŋgè bɔ̀ ó wɛ́ɛ̀**   **òŋgér ŋgè ó wɛ̀ɛ́ bɔ̌**
  thing which they PAST choose   thing which PAST choose they
  'what did they 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 /ó/):

(29)   *underlying verb tone*   *MC* /ó/ PAST   *NSRC* /ó/ PAST
    a. /H/ **/mɔ́n/** 'see'   HL **[mɔ̂n]**   H   **[mɔ́n]**
    b. /L/ **/wɛ̀ɛ̀/** 'choose'   HL **[wɛ́ɛ̀]**   LH   **[wɛ̀ɛ́]**

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)

	/mɔ́n/ 'see'	**/wɛ̀ɛ̀/** 'choose'	
MC:	**bààr ó mɔ̂n máán**	**bààr ó wɛ́ɛ̀ máán**	'the people saw/chose the wine'
SRC:	**bààr ò mɔ̂n máán**	**bààr ò wɛ́ɛ̀ máán**	'the people who saw/chose the wine'
NSRC:	**máán ò mɔ́n bààr**	**máán ↓ó wɛ̀ɛ́ bààr**	'the wine that the people saw/chose'
	máán ò mɔ́n b<u>áá</u>r	**máán ↓ó wɛ̀ɛ̀ b<u>áá</u>r**	
	/mɔ́n + ´ + bààr/	/wɛ̀ɛ̀ + ´ + bààr/	

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 **wɛ̀ɛ̀** 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)

	SRC	*NSRC*	
Habitual	**a-ba-R-a**	**ba-R-a**	**a-** 'augment', **ba-** 'they' (cl.2)
	H H	H	R = root
Today Past	**a-ba-a-R-a**	**ba-a-R-a**	**-a-** 'tense marker', **-a** 'inflectional
	H H	H	final V'
Yesterday Past	**a-ba-R-ile**	**ba-R-ile**	**-ile** 'perfective ending'
	H H	H	

As seen, the SRC schemas end in a toneless inflectional **/-a/**, while the NSRC schemas end in a H tone **/-á/** (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'
                      H   H

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)   a.   **mì   ô   yúp   mùùr   ò   kpê**
              I   PAST   ask   person PAST   die
              'I asked who died' (lit. 'the person who died') (= SRC)
    b.   **mì   ô   yúp   mùùr   ò   mɔ́n bɔ̌**
              I   PAST   ask   person PAST   see   they
              'I asked who they saw' (lit. 'the person they saw') (= NSRC)
    c.   **mì   ô   yúp   òŋgér   ò   dzé bɔ̌**
              I   PAST   ask   thing   PAST   eat   they
              'I asked what they ate' (lit. 'the thing they ate') (= NSRC)

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)   a.   **kèr   mwàán   ↓ó   dzé   ìkwɔ̀**
              if   child   PAST   eat   banana
              'if the child ate/had eaten the banana . . .'
    b.   **mì   ô   yúb   kèr   mwàán   ↓ó   dzé   ńdé   íkwɔ̀**
              I   PAST   ask   if   child   PAST   eat   he   banana
              'I asked if the child ate the banana'

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

(35)   a.   **bɔ̀   ò   lúm sám   bɔ̀   ó   kí   yɛ̀   ndzàà**
              they   PAST leave reason they   PAST   be   with   hunger
              'they left because they were hungry'
    b.   **mì   ô   yúp   sám   ŋgé   ò   lúm bɔ̌**
              I   PAST   ask   reason which   PAST   leave they
              'I asked why they left'

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   ǹdé kó   mpfúr mǐ`**
         money that I   PRES want   he   SBJN me.pay me
         'the money that I want him to pay me'

   b. **mì ó   tyɛ́n yɛ̀ mwàán (nìngé) ǹdé ké   lûm**
         I   PAST say to child   (that) he SBJN leave
         'I told the child to leave'   (***ké lúm ǹdé**)

   c. **òŋgér ŋgé   ò   tyɛ́n yǎ yɛ̀ mwàán (nìnge) ǹdé 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 ***nìngé*** 'that' are SV, as in (37a), even if embedded in an NSRC, as in (37b).

(37) a. **yà ó   tyɛ́n (nìngé) yà ò   pé Tùkúmù ŋ́kɔ́p**
         you PAST say (that) you PAST give Tukumu cup
         'you said you gave Tukumu the cup'   (***ò pé yǎ`**)

   b. **ŋ́kɔ́p nà ò   tyɛ́n yǎ (nìŋgé) yà ò   pé   Tùkúmù**
         cup   that PAST say you (that) you PAST give Tukumu
         'the cup you said you gave to Tukumu'   (***ò pé yǎ`**)

   c. **ŋ́kɔ́p nà ò   tyɛ́n yǎ nà ò   pé yǎ   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. **òŋgér ŋgé   ò   tyɛ́n bǒ kókáár nìŋgé mì ó   dzê**
         thing which PAST say   they to.woman that   I PAST eat
         'what did they tell the woman that I ate?'   (SV)

   b. **òŋgér ŋgé   ò   tyɛ́n bǒ kókáár (nà) ò   dzé mǐ`**
         thing which PAST say   they to.woman (that) PAST eat I
         'what did they tell the woman that I ate?'   (VS)

   c. **òŋgér ŋgé   (nà) ò   dzé mǐ ò   tyɛ́n bǒ   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. **bǐ (nà) Tùkúmù ò mɔ́n ńdé à máŋ kó ndzò**
          we (that) Tukumu PAST see he PRES be at house
          'we whom Tukumu saw are in the house'

    b. **bǐ (nà) (ŋg') ò mɔ́n Tùkúmù à máŋ kó ndzò**
        we (that) (which) PAST see Tukumu PRES be at house
        'we whom Tukumu saw are in the house'

    c. **Tùkúmù, (nà) (ŋg') ò mɔ́n bǒ, à máŋ kó**
        Tukumu (that) (which) PAST see they PRES be at
        ndzò
        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 ó yé bǒ òmpá mǐ`**
          bananas that PAST come they to.me.give me
          'the bananas that they came to give me'

    b. **àkwɔ̀ nà ó yé òmpá bǒ mǐ`**
        bananas that PAST come to.me.give they me
        'the bananas that they came to give me'

    c. **mbyǎ nà ó wɛ̀ɛ̀ ǹdé òpìŋ ǹtsúr**
        knife that PAST take s/he to.cut meat
        'the knife that s/he took to cut the meat'

    d. **mbyǎ nà ó wɛ̀ɛ̀ òpìŋ ǹdé ǹtsúr**
        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. **fùfú nà ò ŋkáŋ ↓mí òdzá**
          fufu that PAST JUST I to.eat
          'the fufu that I have just eaten'

    b. ***fùfú nà ò ŋkáŋ òdzá mǐ`**
        fufu that PAST JUST to.eat I

    c. **fùfú　nà　ò　　tún　　mí　òdzá**
        fufu　 that PAST　refuse　I　 to.eat
        'the fufu that I did not eat' (lit. 'that I refused to eat')
    d. ***fùfú　nà　ò　　tún　　òdzá　mǐˋ**
        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　ò　　mɔ́n òkáár　bàân
        day　that PAST　see　woman　children
        'the day that the woman saw the children'
    b. pron+pron
        èsúú nà　ò　　mɔ́n ńdé　bɔ̌
        day　that PAST　see　she　 them
        'the day that she saw them'
    c. pron+N
        èsúú nà　ò　　 mɔ́n ńdé bàân
        day　 that PAST　see　she　children
        'the day that she saw the children'
    d. N+pron
        *èsúú nà　ò　　 mɔ́n òkáár　bɔ̌
         day　that PAST　 see　woman　them
         'the day that the woman saw them'
    e. SVs
        èsúú nà　òkáár　ò　　mɔ́n ńdé　bɔ̌
        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   mwɛ́ mwǎan òŋkǎan
       woman PAST show child   book
       'the woman showed the child the book'

      b.   pron+pron
       òkáár   ó   mwɛ́ ndé   nɔ̌
       woman PAST show him   it
       'the woman showed him it'

      c.   pron+N
       òkáár   ó   mwɛ́ ndé òŋkǎan
       woman PAST show him book
       'the woman showed him the book'

      d.   N+pron
       òkáár   ó   mwɛ́   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-<u>anyu</u>**
       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 (Philippson 1993):

(48) *affirmative*   *negative*

affirmative	*negative*	
ní-le-m-bón-íre	**ní-le-m-bón-íre ɲí**	'I saw/didn't see him'
kú-le-m-bón-íre	**kú-le-m-bón-íre pfó**	'you sg. saw/didn't see him'
á-le-m-bón-íre	**á-le-m-bón-íre wé**	's/he saw/didn't see him'
fú-le-m-bón-íre	**fú-le-m-bón-íre fwé**	'we saw/didn't see him'
ḿ-le-m-bón-íre	**ḿ-le-m-bón-íre mwé**	'you pl. saw/didn't see him'
βá-le-m-bón-íre	**βá-le-m-bón-íre βó**	'they saw/didn't see him'
SM-TM-him-see-TM	SMᵢ-TM-him-see-TM PROᵢ	(SM = subject marker)

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. ↑**ká mà búʔɔ́ ɣɔ̰̀**   'I did not clear' (land)
 b. ↑**ká ò búʔɔ́ ɣô**   'you (sg.) did not clear'

c.	ꜛ**ká bʊ́ʔɔ́ yɛ́**	's/he did not clear'
d.	ꜛ**ká tì bú?ə ɣɔ́ɣɔ̀**	'we (dual) did not clear'
e.	ꜛ**ká bùɣì bú?ɔ́ wúɣɔ́**	'we (excl) did not clear'
f.	ꜛ**ká bùɣìnɔ̀ bú?ɔ́ wúɣɔ́nɔ̀**	'we (incl) did not clear'
g.	ꜛ**ká nì bú?ɔ́ wúŋɔ́**	'you (pl.) did not clear'
h.	ꜛ**ká bì bú?ɔ́ wá**	'they did not clear'

NEG SUBJ$_i$ clear PRO$_i$

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.

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