Going in the clause: ba and be in Santome

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Abstract

This paper investigates the distribution and the properties of the two allomorphs that stand for the verb ‘to go’ in Santome. From the analysis of a range of grammatical properties, such as Case-marking, extraposition, pseudoreflexivisation and serialisation, I conclude that directed motion verbs are unspecified in the lexicon with respect to transitivity. Furthermore, the data show that there is a default form for ‘to go’, which I assume to be merged into the derivation. The non-default form can only be derived post-syntactically if special requirements are met.

1. Introduction

In Santome, a Portuguese-related creole language spoken on the island of São Tomé, two verbs meaning ‘to go’, be and ba, are found in complementary distribution. This pair is unique in the sense that in this language no other allomorphic variation of this type is found. Ferraz (1979:89) briefly describes that ba occurs before locatives and as an auxiliary verb, whereas be occurs elsewhere.

In Hagemeijer (2000:74-5), I argued that this distribution is the result of the positive or negative specification of a telic feature that I claimed to stand for an opposition between verbs of the unaccusative and unergative type respectively.

In the light of the data provided in Hagemeijer (2000), Becker & Veenstra (2003) (henceforth: B & V) argue that the distinctive forms are the result of
morphological encoding of the selection properties of these verbs: be occurs with adjuncts; ba selects arguments. The difference in verb forms, they argue, results from a post-syntactic rule.

In this paper I will show that argument/adjunct distinction is basically correct. I will further argue that be is the underlying verb for ‘to go’, which is unspecified for transitivity in the lexicon. Both ba and be are stored in the lexicon, but only under specific structural conditions is ba drawn from the lexicon and shows up in surface syntax. Therefore I assume that ba is derived post-syntactically.

This paper is organised as follows. Section 2 puts ba/be in a brief historical perspective. Section 3 discusses the core data of the allomorphy. In section 4 and 5 I review the adjunct/argument distinction and show that the predictions are borne out in Santome. The following section, 6, is the most substantial and discusses comitative and pseudo-reflexive constructions and the structural implications for clause structure. Section 7 shows how unspecified transitivity is able to account for the full range of data discussed in the preceding sections. Finally, section 8 contains my conclusions.

2. A short note on the etymology of ba/be

I assume that the allomorphs balbe were derived from the same etymon, namely Portuguese 3sg vai ‘he/she/it goes’ from the irregular directed motion verb ir ‘to go’. The fact that Lung’iye (Principense) exhibits [weθ] in all contexts strongly suggests that [beθ] is the original form in Santome. According to Gunther (1973: 248), the historical route of this item in Lung’iye was *vaθ > *vweθ > we ‘to go’. This type of monophthongisation is commonly found in the Gulf of Guinea Creoles (GGCs). In Santome, the evolution would be *[bay] > [beθ].

Note further that Lunga Ngola (Angolar) also displays the be/ba distinction with a similar distribution to Santome (Maurer 1995). There is no description of ‘to go’ in Fa’d’Ambu (Annonobonense), but upon inspection of Barrena (1957) and Post (1992, 1995), it appears that ba is used as an auxiliary and occasionally before goals, a form bay/bai sometimes precedes goals, and a form be for which I found no instances before goals. This suggests that the pattern might be similar to the one found in Santome/Lunga Ngola.

I would like to point out that there is a possible connection between this allomorphic variation in the GGCs and Edo, the most important early substrate language of Santome (Hagemeijer 1999; Hagemeijer & Parkvall 2001). Since it will be shown that in Santome ba typically occurs with goals and be with other or no lexical material, it is interesting to observe that Edo also has two verbs that express the meaning ‘to go’, namely yo ‘to go to’ (a certain

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2 For the status of labiodentals and bilabials in classic Portuguese, I refer the reader to Teyssier (1980).
place), to attend’ and *rie ‘to go away, to retreat’. The latter form is also (and exclusively) used with goals in the progressive, and (Melzian 1937, Aghaeisi 1986). Note further that Kikongo, the Bantu substrate or adstrate language, uses a wide range of different verbs for types of going and exhibits suppletion rules for different tense forms (Bentley 1967).

As to the etymology of *ba, it is possible that the original Portuguese form [bay] evolved into two distinct phonetic items under pressure of the substrate semantics. A more appealing alternative is the possibility that the Portuguese goal-denoting preposition *a ‘to(wards)’ in the structure of directed motion verbs (*ir a ‘to go to’, *vir a ‘to come to’, *chegar a ‘arrive at’) might have been historically responsible for the emergence of the allomorph *ba. The evolution would have been *be+a > *ba. Since *a-prepositioned goals are typically argumental in Portuguese, this hypothesis explains why *ba is obligatorily transitive. In addition, goal-arguments of Portuguese di-transitive verbs like *dar ‘to give’ are also *a-prepositioned and have become direct complements in Santome.

3. Preliminary data

In Hagemeijer (2000) I argued that telicity is responsible for the distribution of *ba/*be and based this claim on examples like the following.

<table>
<thead>
<tr>
<th>Ba</th>
<th>Be</th>
</tr>
</thead>
<tbody>
<tr>
<td>E ba [ala]. 3SG go there  ‘He went there.’</td>
<td>E be [dai]. 3SG go from here  ‘He went from here.’</td>
</tr>
<tr>
<td>E ba [ke]. 3SG go house  ‘He went home.’</td>
<td>E be [ku bô]. 3SG go with you  ‘He went with you.’</td>
</tr>
<tr>
<td>E ba [omali]. 3SG go sea  ‘He went to the sea.’</td>
<td>E be [d’omali]. 3SG go by sea  ‘He went by sea.’</td>
</tr>
<tr>
<td>E ba [wê karu]. 3SG go front car  ‘He went to the front of the car.’</td>
<td>E be [ni wê karu]. 3SG go in front car  ‘He went in the front seat of the car.’</td>
</tr>
</tbody>
</table>

3 This phonological process affecting *be is supported by other examples, like *be antê ‘go until’, which becomes [bante] in fast speech.
One of the arguments invoked for this distinction relates to verb reduplication patterns in ST: like manner of motion verbs, *be* can be reduplicated; like verbs that are typically unaccusatives, *ba* cannot.

(1) a. Zon landa-landa, so xiga kanwa.  
Zon swim-swim then arrive canoe.  

Zon kept swimming and then made it to the canoe.'

b. Zon be-be, so xiga losa.  
Zon go-go then arrive plantation.  

Zon went and went and then made it to the plantation.'

(2) a. *Zon môlê-môlê ku dôlô muntu.  
Zon die-die with pain much  

b. *Zon ba-ba poson.  
Zon go-go town.

The special status of goals in the argument structure of directed motion verbs follows from the fact that they typically occur adjacent to the verb (*ba*) and from their prepositionless shape. Compare the following pairs:

(3) a. Ê ba/*be [DP losa] [PP ni wê karu].  
3SG go plantation in front car.  

′He went to the plantation in the frontseat of the car.'

b. *Ê ba/*be [PP ni wê karu] [DP losa].

(4) a. Ê ba/*be [DP Pla Konsa] [ASP ka kôlê].  
3SG go Beach Shell ASP run  

′He went running to the Beach of the Shells.'

b. *Ê ba/*be [ASP ka kôlê] [DP Pla Konsa].

(5) a. Ê ba/*be [DP ke] [PartP tasondu /Adv ndjandjan].  
3SG go home [seated / quickly]  

′He went home seated/quickly.'

b. *Ê ba/*be {tasondu/ndjandjan} ke.

The following examples show that implicitly known locations also trigger *ba*. In (6), the location implied is the place where the king is. In (7), the sound of the falling breadfruit expressed by ideophone *din* identifies the ground as the location they fall on.

(6) …pa non dêsê ba Sun Alê.  
…for 1PL go.down go Mr. King  

′…in order for us to go down to the King(s place).’

(7) N kônô dôsu kabêsa ba din.  
1SG collect two head go IDEOPH  

′I cut off two heads (of breadfruit) that hit the ground.’
B & V point out that the telicity analysis is problematic because *be* appears when goal-denoting arguments are shifted with comitative constituents (cf. 8a-b) and when a Wh-argument is moved to the clause-initial position.

(8)  
(a) Ê  ba/*be 
[DP  ke Zon]  
[PP  ku inen mina se].
3SG go home Zon with 3PL child SP
‘He went to John’s place with these children.’

(b) Ê be/*ba 
[PP  ku inen mina se]  
[DP  ke Zon].
Both: ‘He went with these children to John's place.’

(9) Andji ku ê subli be/*ba?
where KU 3SG go.up go?
‘Where did he go up to?’

Informally stated, all the previous examples show that whenever the goal does not occur in a strictly adjacent position to the verb, *be* has to surface. Note that telicity would further fail to explain the following construction with a goal argument:

(10) Zon be/*ba  antê  awa.
Zon go until river
‘Zon went until the river.’

The predicate in (10) is telic but *be* patterns obligatorily. Note that this is not due to a phonological restriction on the co-occurrence of vowels with the same quality (e.g. Zon *ba* *awa* ‘Zon went (to the) river’).

B & V therefore argue that the distribution of *ba* and *be* reflects selection properties: *ba* selects arguments, *be* is used with adjuncts. They further argue that the choice between both forms concerns a post-syntactic process that parallels the distribution of long/short verb endings found in some French-related Creoles, which are shortly discussed in the next section.

4. Adjuncts & arguments

B & V claim that the data from French-related Creoles, especially Morrisyen, and Santome show that these creole languages developed “properties of the third kind”, i.e. language-internal strategies that are neither substrate nor superstrate related. In a French-related creole like Morrisyen, they argue, the selection properties of verbs are encoded in long and short verb endings. The examples from Morrisyen were taken from B & V.

(11) Pye ti  manz/*manze  min. (Morrisyen)
Peter TNS eat Chinese noodles
‘Peter ate Chinese noodles.’
(12) Pyer ti manze/*manz Rozil
   Peter TNS eat Rose-Hill
   ‘Peter ate at Rose-Hill.’
(13) Pyer ti al/*ale Rozil
   Peter TNS go Rozil
   ‘Peter went to Rose-Hill.’

In (11) and (13), we are dealing with selected items, which show up with
the verb in the short form (respectively manz and al), whereas a non-selected
argument exhibits the long form, as in (12). The following example illustrates
that Wh-movement of an internal argument and passivisation also yield the
long form:

(14) Ki Pyer ti manze/*manz? (Morrisyen)
    what Peter TNS eat
    ‘What did Peter eat?’
(15) Duri vande dan labutik.
    Rice sell LOC shop
    ‘Rice is sold in the shops.’

In both cases, a strict argument/adjunct distinction fails to apply because
the moved argument preserves its argumental status. As in Santome, there is
an adjacency constraint on the syncopation rule that induces the short form if
the verb is followed by its argument. Consider also the following middle con-
struction in Morrisyen:

(16) Duri van dan labutik. (Morrisyen)
    Rice sells in shops.’

Middles are traditionally analysed as passives. The internal argument
moves to the subject position to receive nominative Case. It is therefore unclear why the verb ending in middles differs from passives. It is suggestive
that the long and short form in (15) and (16) encode an aspectual contrast.
Although the argument/adjunct distinction does seem to play a role in the
long/short endings, it does not seem to account for the full range of data.
The data from Reunionais, Haitian and Louisianais also suggest that (i) the
long/short endings should very probably receive different (language-internal)
analyses in each of these creoles, that (ii) the data in none of these languages
point towards an exclusive adjunct/argument distinction and that (iii) the

4 Note, however, that there are languages in which middles, just like passives, are arguably formed in the lexicon (cf. Marelj 2004). Given that language-internally middles and passives have identical syntactic properties, it seems that the explanation for middles and passives in Morrisyen should be sought in semantics rather than in a lexical vs. syntactic approach.
present/past distinction is available to different extents in these creoles, a fact which is probably related to French.

Several things set apart the *be*/*ba* opposition in Santome from the long/short endings in French-related Creoles: (i) it is a single case of allo-morphy and not a generalized lexical pattern, (ii) it is unrelated to tense/aspect contrasts, and (iii) contrary to B & V’s claim that *ba/be* reflects a language-internal innovation, there is some evidence that the importance of superstrate and substrate influence should not be ruled out *a priori*.

Despite the geographical distance between all these creole languages, there are admittedly some surface similarities between the syncopation rule and the suppletive pair in Santome. Wh-in-situ and Wh-moved arguments are a clear example hereof.

(17) a. Zon ba andji?
   ‘Zon went where?’
   b. Andji ku Zon be?
   ‘Where did Zon go?’

This type of alternation could also be observed in Morrisyen (compare ex. (11) to (14)), as well as in Haitian (DeGraff 2001):

(18) a. Konbyen dan Tonton Bouki gen*(yen)? (Haitian)
   ‘How many teeth does Uncle Bouki have?’
   b. Tonton Bouki gen*(yen) 32 dan l?
   ‘Uncle Bouki has (all of) his 32 teeth.’

According to DeGraff, the short form *gen* surfaces when the object remains in situ. Active and passive sentences also use a morphological contrast in Haitian. But, as DeGraff mentions, the facts in Haitian are more complex and still lack description. For an overview of the literature on the long/short forms in the other French-related Creoles, I refer the reader to B & V (2003).

5. Case-marking

In this section it will be shown that the argument/adjunct distinction argued for by B & V is indeed operative in Santome. One of the obstacles to the telicity hypothesis was the construction with *anté* ‘until’, which requires *be* to surface. The relevant contrast is between the following two sentences. In both cases, the verb selects a goal-denoting argument but different verb forms are triggered.
Maya be/*ba antê awa.
Maya go until river
‘Maya went to the river.’

Maya ba/*be nglêntu awa.
Maya go inside river
‘Maya went into the river.’

These two constructions also differ with respect to adverb placement. In Santome, adverbs cannot occur in between a verb and its internal argument (cf. 21). As expected, an adverb like ndjandjan ‘quickly’ is therefore unable to intervene between a directed motion verb and its goal complement (cf. 22), contrasting with cases like (23) and (24).

(21) Ê bili (*ndjandjan) [zanela] (ndjandjan).
3SG open quickly window quickly
‘He opened the window quickly.’

(22) Ê ba (*ndjandjan) [liba ke] (ndjandjan).
3SG go (quickly) top house (quickly)
‘He went on (top of) the house quickly.’

(23) Ê be (ndjandjan) [antê poson] (ndjandjan).
3SG go quickly until city quickly
‘He went quickly until the city of S. Tomé.’

(24) Ê be/kôlê (ndjandjan) [ba losa] (ndjandjan).
3SG go/run (quickly) go plantation (ndjandjan)
‘He went/ran (quickly) to the plantation.’

It is therefore suggestive that the antê-construction (cf. 23) and VP₂ in a serial verb construction like (24) receive an adjunct analysis, because they cannot be Case-marked by be. In other words, superficially it looks as if only ba has Case-assigning properties. Consequently, the constituent antê awa cannot receive Case from the verb, whereas nglêntu awa can. Why this happens becomes straightforward once we start inspecting those items that fill in what I label the ‘prepositional function’. Despite the traditional view that prepositions are considered items of a closed-class with the categorial label [-N, -V], it is well known that the ‘prepositional function’ is cross-linguistically filled in by lexical elements from different categories.

In Santome, most items that exhibit a ‘prepositional functional’ cannot be considered prepositions proper. In fact, items that can be labeled as [+N, -V] and [-N, +V] make up the ‘prepositional function’ to a significant extent. The [+N, -V] class comprises nominals like nglêntu ‘inside’, which basically behave as intransitive prepositions. The items that feature as [-N, +V] are typically verbs in the VP₂ slot of serial verb constructions.⁵ The following table

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⁵ This statement somewhat obscures the complexity of the grammaticalisation paths of these items, especially the second verb in serialising constructions (cf.
illustrates this tripartite categorial system of prepositions proper, nominals and the second verb in serial verb constructions:

Table II. Lexical items with ‘prepositional functions’.

<table>
<thead>
<tr>
<th>[-N, -V]  be</th>
<th>[+N, -V]  ba</th>
<th>[-N, +V] (V₂ in serialization)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Di ‘of’</td>
<td>Wē ‘in front of, the front, eye’</td>
<td></td>
</tr>
<tr>
<td>Ni ‘in, from’</td>
<td>Tlaxi ‘behind, the backpart, back’</td>
<td>Da ‘for, from, to’ (to give)⁶</td>
</tr>
<tr>
<td>Anté ‘until’</td>
<td>(N)glêntu ‘inside, the inside’</td>
<td>Pê ‘in’ (to put)</td>
</tr>
<tr>
<td>Jina ‘from, since’</td>
<td>Liba ‘on top of, upper part’</td>
<td>Subli ‘up’ (to go up)</td>
</tr>
<tr>
<td>Sē ‘without’</td>
<td>Basu ‘beneath, lower part’</td>
<td>Dêsê ‘down’ (to go down)</td>
</tr>
<tr>
<td>Ku ‘with’</td>
<td>Bodo ‘next to, along, side’</td>
<td>Loja ‘to go around’</td>
</tr>
</tbody>
</table>

For the present purpose, I will focus on the items in the first two columns. Crucially, all the items in the first column occur without exception with be, whereas all the [+N, -V] in the second column require ba. This contrast is illustrated in the following pair of sentences.

(25) É  be {d’omali / antē omali}  
  3SG go by-sea / until sea.  
  ‘He went {by sea / until the sea}.’

(26) É  ba {wê/nglêntu} ke.  
  He go front/inside house  
  ‘He went {in front of / inside} the house.’

These examples show that selection of a non-prepositional goal argument of the second column has an over reflex on the verb form. Prepositions proper in the first column assign Case to their object in a standard fashion. The nominal items in the second column have to receive Case directly from the verb. Hence it also follows that locative items like ala/nala ‘there’ occurring with ba are actually Case-marked nominals.⁷

Hagemeijer 2000, 2001). It can be shown that some of these verbs exhibit both prepositional and verbal properties.

⁶ Although I have included da in this class, it has no verbal features (anymore?) in serial verb constructions. In this sense, it should integrate the first column.

⁷ In some specific cases prepositional ni ‘in’ contracts with nominals, like nglêntu ‘inside’ or nala ‘there’, and yet ba occurs. I assume that these items have become
There is language-internal evidence for the different status of prepositions proper and nominal preposition-like elements. Unlike prepositions proper, all the nominals listed in the second column of table II can be used intransitively, whereas the prepositional items in the first column cannot.

(27) Zon ba nglêntu/wê.
     ‘Zon went inside/front.’

(28) *Zon be antê/di/jina/ku.
     Zon went until/of/with

Secondly, prepositions like antê are able to select the nominals of the second column of table II.

(29) Zon be [PP antê [DP liba [DP budu]]].
     Zon go until top stone
     ‘Zon went until on top of the stone.’

Another matter that needs to be settled is how DPs that follow nominal prepositions are Case-marked. Consider the DP ke ‘house’ in the following example or budu in (29) above.

(30) Maya ba [DP nglêntu [DP ke]].
     Maya go inside house
     ‘Maya went inside the house.’

Since DPs do not have direct Case-marking properties, the insertion of an additional Case-marking item is required to mediate the relation with another DP, like English ‘of’. In Santome, the insertion of such an element is not visible at the surface, but becomes clear upon extraction of the relevant argument. This is exemplified by focus and left dislocated constructions, where di ‘of’ is obligatorily inserted. The contraction of di and spelled-out trace ê, signalling that movement has taken place, yields dê.8

(31) Awa so Maya ba nglêntu *(dê).
     river FOC Maya go inside of-3SG
     ‘It was the RIVER Maya went into.’

(32) Karu, Zon ba wê *(dê).
     car Zon go front of-3SG
     The car, Zon went to the front of it.

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8 Cf. Hagemeijer (2000) and Alexandre & Hagemeijer (2002) for a discussion of spelled-out traces and resumptivisation in Santome. Note also that vowel-initial nouns unequivocally show that there is a Case-maker in these structures: nglêntu *(d)’awa ‘inside (of) the water/river.’
In this section it was shown that Santome has a limited number of prepositions proper. The split between nominal and prepositional elements corresponds in fact to an argument/adjunct opposition as argued for by B & V. I believe, however, that the argument/adjunct distinction should be restated as a more general principle of Case-marking. The slight advantage of Case-marking over the argument/adjunct distinction is that goal-denoting arguments that do not occur with ba, like the antê-construction in (19) can receive a thematic role from the verb but receive Case from the preposition.

The proposed Case-marking principle explains away the bulk of the data. The data up to this point have further shown that ba empirically restricted to environments where two conditions have to be fulfilled, namely i) the presence of an overt or implicit goal-denoting DP, and ii) adjacency of this argument to the verb. Case-marking does, however, not explain that be pops up when goals are non-adjacent to the verb. The next section will deal in a detailed way with one such construction.

6. The comitative-goal shift

One of the ‘special cases’ is comitatives (cf. ex. (8)). This section addresses why comitatives, unlike other constituents, are able to shift along with the goal argument and what the implications are for clause structure.

6.1. Syntactic properties of comitatives

Despite the argumental status of goals argued for above, it was shown that comitatives are exceptional because they can intervene between the verb and the goal, as in (33). With non-goal arguments, this alternation is precluded, as illustrated in (34).

(33) Ê be [ku migu dê] [ke Zon].
3SG go with friend of-3SG house Zon
‘He went with his friend to Zon’s place.’

(34) *Ê kume [ku migu dê] [pixi].
3SG eat with friend of-3SG fish
‘He ate fish with his friend.’

Note, in the first place, that comitatives are always optional. Nevertheless, concomitant constituents play a special role in argument structure because they are linked to another participant (the subject in the cases under discussion), although this does not necessarily entail equal participation. Crosslinguistically, the concomitant relation manifests itself in several domains, from Theta-sharing to (less common) instances of Case-sharing (cf. Lehmann & Shin MS).
In spite of their specific status, comitatives are generally not considered to have argumental status. Baker (1992), for instance, considers comitatives non-subcategorized second agents or second themes, i.e. constituents lacking a primitive thematic role. This does not necessarily imply that comitatives also behave like adjuncts. Schütze (1995), for instance, concludes that in English instrumentals, and comitatives alike, pattern more like arguments.

In Santome, goals and comitatives have several common properties, of which I would like to highlight the acceptable extraction from NP-islands of a D-linked Wh-constituent (35a-b).

(35) a. Kê mosu ku Zon kunda ku mwala KU
    What boy KU Zon think COMP woman REL
    ska dwêntxi be ku ê?
    ASP ill go with 3SG
    ‘What boy did Zon think that the woman who is ill went with?’

b. Kê fela ku Zon kunda ku mwala ku ska
    What market KU Zon think COMP woman REL ASP
dwentxi be?
    ill go
    ‘What market did Zon think that the woman who is ill went to?’

The basic difference between these two constituents relates to adverb placement. Comitatives are more flexible with respect to the position in which they can occur. It was shown that typical VP-adverbs couldn’t intervene between the verb and the goal (cf. 36a). This is fully acceptable with comitative PPs (cf. 36b).

(36) a. Zon ba (*ndjandjan) fela (ndjandjan).
    ‘Zon went to the market quickly.’
    b. Zon be (ndjandjan) ku anzu (ndjandjan).
    ‘Zon went quickly with the baby.’

Note further that, unlike comitatives, typical VP-adverbs introduced by the same preposition ku ‘with’ cannot be stacked between the verb and the goal.

(37) Zon ka lentla (*ku ope dê) palaxu (ku ope dê).
    Zon ASP enter (with foot of-3SG) palace (with foot of-3SG)
    ‘Zon enters the palace on his own.’

(38) Zon ba (*ku fomi) xipitali (ku fomi).
    Zon go (with hunger) hospital (with hunger)
    ‘Zon went hungry to the hospital.’
The examples in (39) below further show that goals cannot be separated from the verb by more than one constituent (cf. 39a). Example (39b) shows that there is no rigid ordering between VP-adverbs and the comitative when they follow the goal.

(39) a. Zon be ku mwala (?!/ndjandjan) fela (ndjandjan).
   Zon go with woman (quickly) market (quickly)
   ‘Zon went with the woman to the market quickly.’

b. Zon ba fela (ndjandjan) ku mwala (ndjandjan).
   ‘Zon went (quickly) to the market with the woman (quickly).’

This difference confirms the intuition that despite their special status comitatives are best analysed as adjuncts and goals as arguments. The reason behind the shift is related to the informational structure of the sentence. New information, i.e. the questioned material, occurs in the right periphery of the sentence, as shown in the following pairs. Therefore, the answers in (40b) and (41b) are appropriate with respect to the questions in (40a) and (40b) respectively, whereas (40c) and (41c) are not.

(40) a. Kê ngê ku Zon ba ke ku ê?
   what person KU Zon go house with 3SG
   ‘With whom did Zon go home?’

b. Ê ba ke ku inen mina se
   3SG go house with PL children SP
   ‘He went home with these children.’

c. ??Ê be ku inen mina se ke.

(41) a. Anji ku Zon be ku inen mina se?
   where KU Zon go with PL child SP
   ‘Where did Zon go with these children.’

b. Ê be ku inen ke.
   3SG go with 3PL house
   ‘He went with them home.’

c. ??Ê be ke ku inen.

This means that the comitative PP typically has the status of old information when it precedes the goal. All the instances of pronominalized comitatives (either animate or non-animate) in my corpus occur to the immediate right of the motion verb, which is predicted from the fact that pronouns typically have old information status. Non-pronominalized comitatives can of course occur to the left or the right of the goal according to their informational status.
6.2. Structural hypotheses for the comitative-goal shift

**Hypothesis 1. Scrambling + verb movement**

Structurally speaking, one could come up with a scenario in which the comitative is basically right-adjoined to VP and and left-joins through scrambling to VP after the verb has moved out of VP. The motivation for scrambling would be to escape from the default clause-final focus position, in the sense of Reinhart (1995). This scenario is illustrated in the following tree structure:

(42) TP
    SUBJ
    ... bej VP
    VP PP-comitative
    PPk VP tk V'
    tj SC
    ti GoalP

Note that I assume that the presence of a goal corresponds to an unaccusative structure. The subject and the goal form a small clause (SC) in the sense of Hoekstra & Mulder (1990). This means that throughout this paper I will treat ba/be as unaccusative verbs. Although one of the uses of be is intransitive, it is typically perfective in the sense that it focuses on the movement away of the deictic point of reference. This becomes clear by adding an event-delimiting adverb to the clause. The example in (43) crucially sets apart manner of motion verbs from directed motion verbs.

(43) Zon be/bi/*kôlê n’ũa minutu.
    Zon go/come/run in-one minute
    ‘Zon went/came/*ran in a minute.’

Only apparently this goes against the claim that reduplication of be yields an unergative in example (1), since I assume that reduplication is a morphological process that may affect the semantic and syntactic structure of verbs.

Note also that the comitative is right-joined to VP. Here I follow the framework by Ernst (2002) that allows for right-adjunction. After construing
the VP, the subject moves in a standard fashion to Spec,TP and the verb would arguably raise and adjoin to an aspectual node, given the strict adjacency between Asp° and V°. After verb movement, the comitative PP would left-adjoin to VP to give the correct surface order for S-V-PP_comitative-Goal.

There are several problems with this hypothesis, though. First, it was shown that comitatives cannot scramble with non-goal arguments (cf. 34). Second, it is not clear why only comitatives – and not other adverbials – would be able to scramble and left-adjoin to VP. Moreover, basic left-adjunction to VP is not allowed at all. Here I follow Costa (1998: 288), who suggests that adjunction by movement cannot target a category where base-generated adjunction is impossible. Third, the motivation for verb movement under this hypothesis is rather obscure and seems to be exclusively related to deriving the correct order with comitatives. Verb movement is counter-intuitive in a language that has no inflectional verbal morphology and responds negatively to quantifier floating and adverb placement tests (cf. Roberts 1999).

In addition to the comitative, it should be noted that there is another case that breaks up the surface adjacency of the verb and the goal, namely pseudo-reflexive pronouns (cf. 44a). Whenever the clause contains a pseudo-reflexive (PSR), a comitative and a goal, the goal obligatorily precedes the comitative (cf. contrast between exs. 44a and 44b).

(44) a. N be mu poson ku piskadô.  
1SG go PSR city with fisherman  
‘I went to the city of São Tomé with the fisherman.’

b. *N be mu ku piskadô poson.  
(I went with the fisherman to the city of São Tomé)

Quantifier floating is, however, ruled out on independent grounds and therefore it does not constitute a reliable diagnostic for verb movement. Santome does not have bare quantifiers, i.e. quantifiers that occur without a host-DP, as illustrated with quantifiers *tudu ‘all’, *kada ‘all’ and kwakwali ‘any’. Therefore, the two classic analyses of floating quantifiers, namely (i) stranding after DP-movement and (ii) adjunction and co-indexing with a DP through an interpretation rule, are simply not an option in Santome.

(i) Tudu/kada/kwakwali *(sode) ba matu.  
All/each/any soldier go bush-bush  
‘All the soldiers/Each soldier/Any soldier} went to the bush-bush.’

(ii) Sode ba (*tudu) matu (*tudu).  
# ‘The soldiers went all to the bush-bush.’

As to the adverb-stacking as a diagnosis for verb movement, it appears that Santome only has a limited number of positions to adjoin adverbs. Crucially, left adjunction to VP gives bad results in a verb movement scenario and in a non-verb movement scenario: typical VP-adverbs never precede the predicate and never separate the verb from the object. Moreover, adverbs can also not be stacked in between preverbal functional TMA-heads, which runs counter to frameworks where adverb placement syntactically and semantically depends on functional heads (e.g. Cinque 1999). It therefore follows that certain positions are unavailable for adjunction.
Note further that these forms are underlyingly PPs and always trigger be.\footnote{The PP-status of pseudo-reflexives follows from the fact that the forms used for 3SG and 2/3PL are introduced by preposition di ‘of’, yielding respectively dê (as in: ê be dê ‘he went’ (lit: 3SG go of-REFL)) and d’inansê/d’inen (lit: of-2PL/3PL), due to being vowel initial. Di is not overtly used for consonant-commencing items. I refer the reader to Ferraz (1979: 69-70) for a discussion of similar effects in possessive constructions.} An analysis of scrambling and verb movement is thus unable to satisfactorily account for the data and is counterintuitive with respect to the linguistic properties of Santome.

**Hypothesis 2: comitatives are adjoined to DP**

Having discarded scrambling of comitatives and verb movement for language-internal reasons, there are at least two analyses that make better predictions with respect to the data: (i) adjunction to the DP with which the comitative is in a concomitant relation or (ii) right-adjunction to VP (discussed in Hypothesis 3 below).

The first hypothesis is in line with the analysis of Ionin & Matushansky (2002) who provide a unified analysis of Russian comitatives, which, in their view, may hold for other languages as well. Under this proposal, the different positions in which comitatives are found are either a reflex of extraposition or stranding. Despite the interest of this analysis, which derives especially from the fact that concomitance is an underlying local relation between participants, it fails to explain the following facts in Santome.

If the comitative is adjoined to the subject of unergative/transitive clauses which are standardly generated in Spec, VP, the comitative precedes the verb on the surface. Therefore either the verb has to move, with all the problems associated to it, or the comitative has to be obligatorily extraposed. However, extraposition runs into the problem that the comitative can occur between the goal and a typical VP adverb like ndjandjan ‘quickly’. This is unexpected because after building the VP, extraposition would target a VP-final slot.

Furthermore, comitative preposition ku also is used for DP-coordination, as in Zon ku Maya ‘Zon and Maya’, which, despite having the same preposition, should arguably receive a different syntactic structure than the comitative. Since the DP-adjunction hypothesis is a strong hypothesis in the sense that is meant to give a single structure for all comitative ku-phrases, coordination above would be the result of moving the DP+PP from a VP-internal position to the surface subject position, whereas true concomitance would be the result of splitting the VP-internal DP+PP and moving the DP and PP to its respective surface positions.

Finally, pseudo-reflexives also constitute counterevidence to the DP-adjunction hypothesis. It was shown in (44b) that the presence of a pseudo-reflexive inhibits the comitative from preceding the goal (but does not inhibit...
it from occurring in final position). It was shown in footnote 10 that pseudo-reflexives are underlying PPs and with motion predicates roughly denote the movement away from the deictic centre or, in a figurative sense, ‘movement away from oneself’.

(45) Zon be [PP dê [GoalP awa]].
    Zon go REFL river
    ‘Zon went to the river.’

In fact, (45) therefore corresponds to a special type of ‘from-to’ PP, albeit this does not carry over transparently to the translation.12 The specificity of (45) also follows once compared to (46).

(46) Zon be [dai losa].
    Zon go from-here plantation
    ‘Zon went from here from the plantation.’
    *‘Zon went from here to the plantation.’

Example (46) looks structurally very similar to (45) but it cannot receive the ‘from-to’ reading, which can only be obtained through serialisation (Ê be dai ba poson ‘He went from here to the city’). Note that inverting the goal poson and dai in (46) also gives the pretended ‘from-to’ (or rather, ‘to-from’) reading. Despite this difference, I claim that the difference between both sentences derives exclusively from the fact that pseudo-reflexives form a weak paradigm and therefore should be treated as phonological clitics.13

Example (46) also follows once compared to (45). The specificity of (45) also follows once compared to (46).

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12 Pseudo-reflexives in fact also appear on typical unaccusatives like nansê ‘to be born’, molê ‘die’ or kyê ‘fall’. Interestingly, when a manner of motion verb is pseudo-reflexified native speakers find it awkward if no endpoint is added (cf. ii).

(i) Bô kôlé (ba losa).
    2SG run (go plantation)
    ‘You ran to the plantation.’

(ii) Bô kôlé bô *(ba losa).
    2SG run PSR (go plantation)
    ‘You ran to the plantation.’

(iii) Bô be bô (ba losa)
    ‘You went (to the plantation).’

It is plausible that in cases like (ii) the pseudo-reflexive adds an inchoative interpretation that makes the predicate unaccusative. Since manner of motion verbs are typically processes, it is suggestive that adding an inchoative interpretation requires the contribution of an endpoint as well. Crucially, the pseudo-reflexive structure with be in (iii) does not require an overt endpoint, which I take as additional evidence that the verb is basically unaccusative. However, this topic requires more research.

13 Note that for many speakers this triggers vowel harmony between [be] ‘to go’ and pseudo-reflexive [dê] yielding [bedê]. Vowel harmony is also found when a
Normally, these PPs cannot intervene between the verb and the goal, as follows from the non-goal meaning of (46). The PP dé is no different in this respect – it is an adjunct – but phonological cliticisation forces the goal to extrapoase out of the SC to derive the surface word order.

Hence, under the DP-adjunction hypothesis, the comitative would have to be extrapoased for the same reasons as the goal but this is a counterintuitive solution and faces the problem that comitative-stacking between the pseudo-reflexive pronoun an the goal is not possible.

In sum, the arguments above make comitative adjunction to DP an undesirable solution.

**Hypothesis 3: comitatives are right-adjoined to VP**

Right-adjunction of the comitative to VP, on the other hand, is fairly unproblematic and makes good predictions with respect to the different word orders in transitive/intransitive clauses. When the comitative precedes the goal, I assume the goal is extra-posed, right-adjointing to VP, where it receives focus. The comitative then becomes automatically defocused. I am, however, aware of a single problem that also arose under the DP-adjunction hypothesis, namely the impossibility to extra-pose the goal (the comitative in the other hypothesis) to the final position when there are two VP-adjuncts:

(47) a. Zon be ku mwala fela ndjandjan.
   Zon go with woman market quickly
   ‘Zon went with the woman to the marker quickly.’

   b. ??Zon be ku mwala ndjandjan fela.

   c. ?? Zon be ndjandjan ku mwala fela.

Assuming that the comitative and the VP adverb are right-adjointed, extra-position is expected to follow the adverb, which results in a degraded sentence for most speakers I have consulted. However, note that in (47a) the adverb in final position is prosodically marked, which suggest that it is only adjoined after extra-positon of the goal or, in alternative, that there is post-syntactic reordering going on at PF. This is particularly appealing in a language with a rigid syntax above V (i.e., no verb movement, base-generated TMA-markers, no AgrP, etc.). The final solution I am therefore proposing for a sentence where the goal precedes the comitative now looks as follows:

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pronoun cliticizes to a verb with low, round vowels: [gɔlə] ‘to search, look for’ and 3sg pronoun [e] yield [gɔləe]. Note, however, that the direction of harmony is different in both cases.
This structure represents the derivation of an unaccusative predicate. If the GoalP fela ‘market’ is extraposed, I assume it right-joins to the comitative VP.

7. ba and be and the lexicon

In the previous sections, I have mostly focused on the specificities of directed motion predicates with a goal in its argument structure. However, as shown in tables I and II, there are many structures that do not exhibit a goal argument. Invariably, be shows up in these cases. The question is of course whether be always has a goal in its argument structure. I will argue that this cannot be the case in the light of examples like the following:

(49) Zon be dai.
    Zon go from-here
    ‘Zon went around.’ (also: ‘Zon went from here’)

(50) Zon be dê.
    Zon go PSR
    ‘Zon went/left/took off.’

(51) Zon kôlê be/bi.
    Zon run go/come (i.e. expressing deixis: away/towards)
    ‘Zon ran away/Zon came running

In these examples, the focus is on the movement away from the deictic centre and there is no implication of a goal argument. Hence I assume that ‘to go’, and arguably the limited range of other verbs of directed motion as well,
can be treated as a transitive or an intransitive verb according to the construction they occur in. I consider transitivity to be an unspecified feature in the lexicon.

The picture now starts getting clear. It followed from the distribution of be that this allomorph occurs in intransitive and transitive environments. As to ba, it only shows up in transitive constructions and under the condition that there is a goal DP adjacent to the verb. Table III sums up these findings.

Table III. Distribution of be and ba.

<table>
<thead>
<tr>
<th>- Transitive</th>
<th>+ Transitive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-adjacency to goal DP</td>
<td>Adjacency to goal DP</td>
</tr>
<tr>
<td>be</td>
<td>be</td>
</tr>
</tbody>
</table>

The conclusion is therefore that be should be considered the default form. Historically this also makes some sense, since it was shown that be better complies with the phonological rules applied to the Portuguese lexicon. Moreover, all the GGCs exhibit be, but Lung’iye lacks ba.

B & V argue that ba to be are post-syntactic, which finds supports in the different forms that appear related to movement operations, such as Wh-movement (cf. 52), but, as shown, also in focus constructions (53) or with goal extraposition, in (54).

(52) Andji ku Zon be?
    where KU Zon go
    ‘Where did Zon go?’

(53) Losa so ê be.
    plantation FOC 3SG go
    ‘He went to the PLANTATION.’

(54) Zon be ku migu fela.
    Zon go with friend market
    ‘Zon went with a friend to the market.’

My claim is that, although be and ba are in the lexicon, be is the default form drawn from the lexicon and standardly merged into the structure of intransitive and transitive directed motion predicates. At spell-out, be is pronounced, unless the requirements for ba are met (goal argument+adjacency). In this sense, ba is the post-syntactic verb form.

It should be noted that I have also considered a solution where only be is listed in the lexicon. According to this hypothesis, the form ba would be derived strictly morphologically through adjacency between the verb and the
goal-denoting DP. To make morphological incorporation (cf. Halle & Marantz 1993) work, there has to be morphological material to change *be* into *ba*. A possibility is to claim that goals are actually PPs with a silent preposition *a*, the Portuguese preposition that probably gave rise to the allomorphic variation in the first place (cf. section 2). Mateu & Rigau (2002) argue that verbs with fossilized incorporation of [Path], such as Spanish *entrar* ‘to enter’, also project a copy of [Path] in the form of a preposition in syntax. Under this hypothesis I have to assume that at least transitive ‘to go’ has a [Path] feature in its conceptual structure. The [Path] on the verb can now match with the silent [Path] feature in the PP structure of goals. The surface form *ba* would then overtly reflect this matching principle under adjacency.

There are good reasons to believe that morphological incorporation along these lines is not tenable. As shown in section 4, nominals like *nglêntu* ‘inside’ occur with *ba* because they need to receive Case. However, the following example shows that these nominal goals do not have an inherent [Path] feature in their semantics; otherwise a directional reading should be possible in (55).

(55) Zon kôlê nglêntu ke.
    Zon run inside house
    ‘Zon ran inside the house.’
    (the location where he did the running/*the location he ran towards)

(56) Zon ba nglêntu ke.
    Zon went inside the house.’ (the location to which he went)

Furthermore, it would leave unexplained examples like (7), where *ba* occurs with an ideophone (*din*) that inherently bears the idea of a goal. The unspecified transitivity hypothesis deals with these cases without any additional assumptions. Since *ba* is in the lexicon, pragmatically understood goals are immediately explained away with. Auxiliary constructions, which always require *ba*, can also be readily subsumed under this analysis:

(57) Inen ba/*be kaopla pixi.
    3PL go buy fish
    ‘They went to buy fish.’

In this case, the VP is a selected goal argument of *ba*, albeit in a more abstract sense.\(^{15}\)

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\(^{14}\) This meaning is expressed through serialisation:
(i) Zon kôlê ba nglêntu ke.
    Zon run go inside house
    ‘Zon ran to(wards) the house.’

\(^{15}\) For a cross-linguistic perspective of future marking through directed motion verbs, I refer the reader to Bourdin (2000) and references therein.
So far I have ignored a special comitative construction that poses a potential problem to my analysis. Consider the occurrence of *ba ku ê* in the following examples. Note that (60) is drawn from Negreiros (1895: 352), showing that the construction is not a recent innovation. I have adapted the orthography of this example.

(58) N **kunu** [tudu lôpa], **ba** ku [ê], awa ba laba.  
1SG *gather* *all clot*h*h* *go* with 3SG *river* *go* *wash*  
‘I gathered all the clothes and took them to the river to wash them.’

(59) Zon **toma** [kwa se], **ba** ku [ê].  
Zon *take* *thing* SP *go* with 3SG  
‘Zon took the thing and left with it.’

(60) Sun Alê ka manda **panha** [inen], ni lwa **ba** ku [ê],  
Mr. King ASP order *pick-up* 3PL *in* street *go* with 3SG  
*Ke di Loda, manda butxiza.*  
house of wheel *order* *baptise*  
‘The King ordered to pick them [children] up on the streets, take them to the House of the Wheel [orphanage]’

These examples seem to violate the grammatical rule that *be* has to show up when comitatives are adjacent to the verb. This property occurs a few times in my corpus, is restricted to *ku ê*, may refer to animates or not, and does not seem to be obligatory. The antecedent of the pronominal is generally contained within the same clause, generally a ‘take’ – serial verb construction (cf. Hagemeijer 2000, Ch. 3), as signalled in bold. Although I do not yet have a fully investigated the appearance of *ba* in the examples above, the examples are highly illustrative of what might be going on here. If one looks carefully at the sentences, it follows that 3sg *ê* in the comitative takes plural and singular antecedents. Human antecedents also take a 3sg anaphoric element, as in (61).

(61) Ami ten ka **ligi** [bô], **ba** ku [ê].  
1SG also ASP *lift-up* 2SG *go* with 3SG  
‘I will also take you with me.’

It follows that *ku ê* is an instance of preposition stranding with an invariable spelled-out trace (cf. Hagemeijer 2000, Ch. 3, Alexandre & Hagemeijer 2002), which constitutes evidence that the object *bô* has been moved. Note that *ê* appears in these constructions because it is the unmarked pronoun. Furthermore, *ê*, being a weak pronoun (*ku ê/*êlê), contrasts with all the other pronouns in the *ku*-paradigm, which are strong (e.g. *ku ami/*n ‘with me’) and
only occur with *be*. In any case, the remaining paradigm can simply not occur in these constructions, which highlights its specificity.

Taking into account these empirical ingredients, my best guess for the moment is that *ba ku ê* is a lexicalised complex that does not convey the exact meaning ‘go with’ but, as follows from the translation, rather means approximately ‘to take/carry along with’.\(^{16}\) This meaning obtains essentially from the specific semantic and syntactic combination of the two serial verbs. If this hypothesis turns out to be correct, *ba ku ê* in the structures above is a transitive verb. Hence, these structures would no longer pose a problem to the analysis outlined in this paper.

8. Final remarks

It follows that the suppletive pair *ba/be* is a very useful tool for our understanding of several aspects of clause structure in Santome. It was shown that selection properties as postulated by B & V are in fact important but do not fully explain the full range of facts. I have argued that domains like Case-marking and information structure explain some of the particular phenomena related to directed motion predicates. Furthermore, the facts from Santome show that telicity and selection should be treated as independent properties. This is very much in line with the specialised literature on this issue. I proposed a solution where the default verb for ‘to go’ is *be*, which is an unaccusative verb that is unspecified in the lexicon with respect to transitivity. *Be* is the default form that can only be overruled and yield *ba* in those contexts where a goal-denoting DP is adjacent to the directed motion verb.

References


\(^{16}\) Lunga Ngola possibly exhibits a similar type of lexicalisation of *ku ê*.

(i) Alê, bô tha ku ê piongo a? (Maurer 1995: 103)

King 2SG be with 3SG nail EMPH

‘King, do you have nails?’

In this example, 3SG *ê* does not agree in number with the bare plural *piongo* nor does *piongo* behave like an afterthought. Therefore it seems that the periphrastic construction *tha ku ê* ‘to have’ takes *piongo* as a direct object.


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