

Double-headed negation in Santome

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Abstract

Santome, a Portuguese-related creole spoken on the island of São Tomé in the Gulf of Guinea, exhibits a standard discontinuous sentence negation pattern consisting of a preverbal marker (Neg1) and a VP-final marker (Neg2). It will be shown (i) that both markers are heads of independent NegPs and (ii) that the VP-final marker is sensitive to the distinction between arguments and adjuncts and, within the latter, peripheral and non-peripheral adjuncts. I will challenge previous analyses of languages that exhibit bipartite negation for which it is claimed that Neg2 projects higher in the structure than Neg1 by proposing that Neg2 heads a NegP that sits lower in the structure than the NegP hosting the preverbal marker.

1. Introduction

Typological studies, such as Kahrel (1996) or Zeijlstra (2004), show that sentence negation varies significantly cross-linguistically and that Jespersen's cycle can be related to a great deal of that variation. Santome¹, one of the four genetically related Portuguese lexifier creoles in the Gulf of Guinea, exhibits a standard negation pattern with a preverbal (pre-TMA) marker and a VP-final marker.² Although this typology has not gone unnoticed in the literature, only recently has it come into a generative spotlight, especially for Afrikaans (e.g. Oosthuizen 1998; Molnárfi 2002; Bell 2004; Biberauer 2007) but also for languages of the Gbe cluster (Aboh 2004, *forthc.*) and a number of other African languages discussed in Bell (2004), such as Hausa and Bkusu. In this paper I will look at the specificities of discontinuous negation in Santome

¹ Also known in the literature as São-Tomense, São Tomé Creole, Forro or Lungwa Santome.

² Similar patterns are also found in the other closely related Gulf of Guinea creoles, especially Fa d' Ambô, the creole language of Annobón (Post 1997).

and investigate whether the proposed analyses for languages exhibiting a similar typology extend to this creole language.

2. The data

In this section I will provide negation data from simple and complex sentences. I will refer to the preverbal negation marker as Neg1 and to the final marker as Neg2. The data pieces are mainly drawn from the author's transcribed spoken corpus or were elicited with native speakers.

2.1. Simple sentences

Neg2 occurs to the right of the verb and its complements. PPs and adverbials that follow the verb typically occur to the left of Neg2. In (1), *fa* occurs to the left of a relativized direct object and in (2) it follows two adverbials.

- (1) Ami **na** ka toma djêlu ni mon san **fa**.
 1SG NEG ASP take money from hand lady NEG
 'I don't take money from the lady.'
- (2) Nê ùa ngê nê ladron **na** ka poto ala ku
 not one person not-even thief NEG ASP step there with
 ope **fa**.
 foot NEG
 'Nobody, not even a thief, enters that place.'

There are, however, constituents that behave more freely with respect to Neg2. First, this is the case of certain temporal adverbials, which may occur to the right of *fa*.³

- (3) A **na** da mu kume **fa** jina plaman.
 IMP NEG give 1SG food NEG since morning
 'They haven't given me food since the morning.'
- (4) N **naxi** laba boka **fa** n **naxi** kume **fa** ante
 1SG NEG wash mouth NEG 1SG NEG eat NEG until
 minda d'ola se.⁴
 measure of-time SP
 'I haven't brushed my teeth yet nor have I eaten until that moment.'

³ IMP = impersonal pronoun; SP = specific marker.

⁴ In addition to preverbal *na*, Santome also exhibits two complex negation markers, *naxi* 'not yet' and *nanta(n)* 'no more, not anymore', which have exactly the same properties as *na* (Hagemeijer 2007).

Note, however, that in its spatial use, adjuncts headed by *jina* and *antê* have to occur to the left of *fa*.

- (5) A **na** ka be antê gala dê **fa**.
 IMP NEG ASP go until heart POS NEG
 ‘They don’t go until the heart of it [the palm tree].’

Sentence-level particles expressing insistence/emphasis occur obligatorily to the right of Neg2, as illustrated in the following examples:

- (6) Sun **na** tôle **fa** ô!
 he NEG silly NEG EMPH
 ‘He (formal) is not silly!’
- (7) N **na** sa klupadu **fa** ê!
 1SG NEG be guilty NEG EMPH
 ‘I’m not guilty!’

Finally, vocatives, although usually in sentence-initial position, are also found in final position, following Neg2.

- (8) Kwa **na** sa dôtolô **fa**, papa mu.
 thing NEG be doctor NEG friend POS
 ‘That is not a doctor, my friend.’

In sum, *fa* is strongly clause-final in simple sentences. Only sentence-level particles, vocatives and a special type of temporal adjuncts occur to its right.

2.2. Complex sentences

This section describes the behavior of Neg2 with respect to different types of clausal domains. Unlike simple sentences where *fa* occurred almost exclusively to the right of all the material, it will be shown that the structural position of Neg2 in complex sentences is dependent on the type of clause-linking.

2.2.1. Embedding with Neg2 in sentence-final position

When *na* occurs in a matrix clause selecting a clausal complement, *fa* occurs invariably at the end of this complement clause, i.e. in sentence-final position from a linear perspective.

- (9) Ome se **na** fla **kuma** ê sa kunhadu bô **fa**.
 man SP NEGsay that 3SG be brother-in-law POS NEG
 ‘The man in question didn’t say he’s your brother-in-law.’

- (10) Maji n **na** sêbê **xi** n ga nghanha ala **fa**.
 but 1SG NEG know COMP 1SG ASP arrive there NEG
 ‘But I don’t know if I get there.’

It can be readily shown that syntactically speaking *fa* does not belong to the embedded clause, since this item is stranded when the embedded clause is fronted, as illustrated in (11).

- (11) [Kuma ê sa kunhadu bô]_i, ome se **na** fla [-]_i **fa**.
 that 3SG be brother-in-law POS man SP NEG say NEG
 ‘That he is your brother-in-law, the man in question didn’t say.’

Simultaneously negating the main and the embedded clause results in a double occurrence of the preverbal negation marker and a single instance of the final marker, as shown in (12a). As in most other languages with this typology, Neg2 cannot occur twice in final position.⁵ However, fronting of the embedded clause in (12b) shows that both domains are, in fact, independently negated:

- (12) a. Ome se **na** fla kuma ê **na** sa kunhadu bô **fa**.
 man SP NEG say that 3SG NEG be brother-in-law POS NEG
 ‘The man in question didn’t say he isn’t your brother-in-law.’
 b. [Kuma ê **na** sa kunhadu bô **fa**]_i, ome **na** fla [-]_i **fa**.
 ‘That he isn’t your brother-in-law, the man in question didn’t say.’

When the complement clause is negated, the discontinuous pattern is obligatory as well, showing that discontinuous negation is not restricted to root clauses.

- (13) San fla: ti, sa kinte se ku san fada mu pa
 she say friend be garden SP REL she tell 1SG for
 n **na** ba floga nê **fa**.
 1SG NEG go play in-3SG NEG
 ‘She said: my friend, it’s the garden that I [she] told you not to go play in.’

In addition to the complement clauses above, several other complex sentences allow this type of ‘long distance’ placement of Neg2. The examples come from serial verb constructions, temporal final clauses, circumstantial

⁵ For these cases, a principle of haplology can be proposed. Biberauer (2007), following Neeleman and van de Koot (2005), who discuss cases of syntactic haplology, argues that in Afrikaans, which exhibits an identical restriction, PF deletion of a copy applies whenever two final negation markers occur in adjacency.

negative clauses, comparative clauses and final relative clauses, as illustrated in (14-18).

- (14) Mosu **na** ligi anzu tanda san **fa**.
 boy NEG lift-up baby hand.ove lady NEG
 ‘The boy didn’t hand the baby over to the lady.’
- (15) Zon **na** kume plumê **zo pa** bêbê **fa**.
 Zon NEG eat first then for drink NEG
 ‘Zon didn’t drink before eating.’
- (16) Ê **na** ka nda **sê pa** ê da topi **fa**.
 3SG NEG ASP walk without for 3SG give trip NEG
 ‘He doesn’t walk without tripping.’
- (17) Zon **na** sa maxi lôngô **dôkê** manu dê **fa**.
 Zon NEG be more tall than brother POS NEG
 ‘He isn’t taller than I am.’
- (18) Firminu soku **na** da mu plastiku **pa** n dêê
 Firminu FOC NEG give 1SG plastic-bag for 1SG go.down
 ku ê **fa**.
 with 3SG NEG
 ‘Firmino didn’t give me a plastic bag to go down (to town) with.’

In all these examples, only the final position is available for *fa*. Although I will not exhaustively discuss the syntactic structure of all these examples, the general observation is that these clauses must attach relatively low in the structure. The highest domain for adjunction in the examples would be AspP, covering the case of serial verb constructions.⁶ None of the loci of adjunction constitute a barrier for the strictly final placement of Neg2.

2.2.2. Embedding with Neg2 in clause-final position

In this section it will be shown that there is also a wide array of contexts where the final marker cannot surface outside the clause that houses Neg1. Examples hereof are syndetic or assyndetic coordination structures and enumerations, causal clauses, conditional clauses or concessive clauses, which follows from, as illustrated in (19-23).

⁶ In Hagemijer (2000, 2001) I argued that in Santome the second VP in serial verb constructions can be analyzed as adjuncts to a lower AspP.

- (19) Inen **na** ka fla **fa** nê inen **na** ka (Bonfim, n.d.)
 3PL NEG ASP speak NEG nor3SG NEGASP
 pô fl'e **fa**.
 can speak-3SG NEG
 'They don't speak nor are they allowed to speak.'
- (20) Kaso se **na** tê ope **fa**, **na** tê mon **fa**,
 dog SP NEG have leg NEG, NEG have forefoot NEG
na tê dentxi **fa**, maji ê ka môdê pasa.
 NEG have tooth NEG but 3SG ASP bite surpass
 'That dog doesn't have backfeet, forefeet and teeth, but it has a mean bite.'
- (21) Mina **na** ka pô kaza ku pobli **fa**, punda
 Girl NEG ASP can marry with poor NEG because
 pobli sa pobli.
 poor be poor
 'The girl cannot marry a poor guy because a poor guy is a poor guy.'
- (22) Xi ê **na** bê faka **fa**, ê **na** bêbê vin **fa**.
 if 3SG NEG see knife NEG 3SG NEG drink wine NEG
 'If he doesn't find the knife, he won't drink wine.'
- (23) Dedu di ngê pô **na** bwa **fa**, a **na** ka
 finger of person can NEG-be good NEG IMP NEG ASP
 kot'e zuga buta **fa**.
 cut-3SG throw throw NEG
 'Even if somebody's finger is not good, you don't cut it off and throw it away.' (Daio 2002: 56)

Thus, the distribution of *fa* with respect to arguments and adjuncts sheds light on its syntactic position by showing that this negation marker is sensitive to peripherality. In section 5 I will address this issue in more detail.

3. The properties of Neg1 and Neg2

In this section it will be shown that both Neg1 and Neg2 in Santome are heads. Following Zeijlstra's (2004: 141) assumption that preverbal negation markers are cross-linguistically heads with syntactic (free elements or particles) or morphological (affixes or clitic-like elements) status, it is expected that Neg1 in Santome is a head. A first piece of evidence in support of the head status of *na* comes from the relation between N-words and Neg1, as in the following examples.

- (24) Nê ùa ngê na bi fa.
 not one person NEG come NEG
 ‘Nobody came.’

I will assume with Zanuttini (1991) and others that the Negative Concord (NC) reading reflects a specifier-head relation.⁷ This is fully in line with Zeijlstra cross-linguistic findings that preverbal negative particles are syntactic heads and trigger NC. The head status is further confirmed by a number of tests presented in Merchant (2001), who discusses the head or specifier status of negation markers in a cross-linguistic perspective. He provides an additional test to determine whether negative markers are phrases. It is argued that only negative markers with an XP status are able to occur in the expression *Why not?*, under the assumption that *why* is an XP and only maximal projections can adjoin to XP (Chomsky 1986). Thus the English negation marker *not*, claimed to be an XP, fares well in this construction, whereas Italian, which exhibits an X^o negation marker, *non*, fails this test, requiring the use of some other negative adverb (*no*).

- (25) a. Why {**not**/***no**}?
 b. *Perchè {**no**/***non**}?

As Merchant points out, these facts nicely correlate with the findings of a number of other constructions, such as negative stripping and negative conditionals. The examples are drawn from Merchant (2001):

- (26) a. Anna left, but {**not**/***no**} Ben.
 b. Anna é partite, ma Ben {**no**/***non**}.
- (27) a. If he comes, it’ll be fine; if {**not**/***no**}, we have a problem.
 b. Se arriva, bene; se {**no**/***non**}, avremo problemi.

Applying these syntactic tests to Santome gives the following results. In the first place, the *why not?* test itself is not available in Santome, since questioning a negative sentence requires an affirmative question. However, there is no restriction on the testability of the related tests proposed by Merchant, namely constituent negation, negative stripping and elliptical protases of conditionals, in (28-30):

⁷ Santome is a language with strict NC (Zeijlstra 2004). The obligatory co-occurrence of the standard negation marker with these N-words is the pattern found in many languages, such as Old Romance (Martins 1997, 2000), Modern Rumanian (Posner 1984), Serbo-Croatian (Progovac 1994) and most creole languages, as was first noted by Bickerton (1981). However, differently from, for instance, Old Romance (Martins 1997, 2000), the items licensed by standard negation in Santome do not behave like weak negative polarity items (see Hagemeijer 2007 for discussion).

- (28) (***na**) Zon ku Maya (***na**).
 NEG Zon with Maya NEG
 ('Not Zon and Maya')
- (29) Zon be, maji (***na**) Maya (***na**).
 Zon go but NEG Maya NEG
 ('Zon went, but not Maya.')
- (30) *Axi **na**, bô ka ba kônsê ngê ku sa ami.
 if NEG 2SG ASP go know person REL be 1SG
 'Give (it) to me so I can take the plaster. If not, you will get to know me.'

Therefore I conclude that Neg1 in Santome is a negative head that belongs to the class of the so-called strong preverbal negative markers (cf. Zanuttini 2001).⁸

The head-status of Neg2, on the other hand, follows from a number of facts, in particular the inability to be moved, to receive stress, to be modified by adverbs, and to be coordinated. The fixed peripheral position of *fa* also follows from the fact that Neg2 can never precede Neg1 or occupy a preverbal position, which is, for instance, possible in French infinite clauses (*parler ou ne pas parler*). Finally, the fact that *fa* behaves like a bound morpheme provides additional support for the head analysis of this negation marker. Therefore I conclude that *fa* is a head in contexts of sentence negation.

Finally, note that the relation between *na* and *fa* is in several ways distinct from NC. Albeit both markers have negative content without cancelling negation, a crucial property of NC, *fa* is not clause-bound⁹ and it is not a contentful element, since NC is typically a relation between a functional element (the negator) and an N-word (typically quantifiers or adverbials). For instance, N-words can typically be used as independent answers, whereas *fa* cannot. Moreover, N-words are arguments or adjuncts, whereas *fa* belongs to the functional structure of the clause. Finally, unlike *fa*, N-words can linearly precede preverbal negation marker *na*, which is obligatory, as in (24). This also applies to minimizers in this language.¹⁰

⁸ In her terminology, weak preverbal negation markers (typically clitics adjoined to V^o) cannot stand alone, requiring the presence of an additional negative element. Although Neg1 in Santome typically occurs together with Neg2, it was shown that this is not necessarily the case.

⁹ Deprez (1999) shows that NC in Haitian Creole is not clause-bound. Note, however, that Haitian does not exhibit a discontinuous negation pattern.

¹⁰ The following example illustrates this type:

(i) Niuku ê **na** kume **fa**.
 MIN 3SG NEG eat NEG
 'He didn't eat the slightest bit.'

4. Neg1 and Neg2 in clause structure

As mentioned, Neg1 is a typical preverbal negative head which I assume to correspond to the head of NegP (Pollock 1989). In fact, even in specific negative contexts that lack Neg2, it follows that Neg1 has negative content, triggering a mood-related interpretation.

- (31) N **na** sêbê mo ê nganha ke.
 1SG NEG know how 3SG arrive house
 ‘I don’t know how he got home.’
- (32) Milhon pa bô **na** b’êlê.
 better for 2SG NEG see-3SG
 ‘You had better not see him.’

Neg2, on the other hand, requires special attention, because it does not fall within the typical patterns of negation. It was already concluded above that this marker belongs to the same clausal domain as Neg1 and that it should also be treated as a head. In addition, in contrastive environments Neg2 may sporadically occur as the sole negation marker.¹¹

- (33) N sa suzu muntu **fô!**
 1SG be dirty very NEG-EMPH
 ‘I’m not very dirty!’

Since *fa* occurs in a strongly final position, it is relevant to investigate how it behaves with respect to the small class of clause-typing elements, i.e. elements that reflect the speakers’ attitude toward the proposition. In example (34) it is shown that *fa* is able to occur to the left of these markers.

- (34) Sun **na** tôle **fa** ô
 he (resp.) NEG-be silly NEG EMPH
 ‘He’s not silly.’

The possibility to co-occur shows that *fa* does not integrate the class of clause-typing markers, since these elements are always mutually exclusive, as illustrated by the ungrammaticality of (35).¹²

¹¹ In these contexts, it is more common to find the emphatic counterpart of *fa*, namely *fô*, which is arguably the contraction of the negation marker *fa* and the clause-typing marker *ô*. Note, however, that at this point there is no evidence that these non-standard patterns are the result of an active Jespersen’s cycle, i.e. there is no evidence that Santome is shifting toward an exclusively Neg2 pattern.

¹² Lefebvre (1998) uses this argumentation for clause-typing particles in Haitian Creole.

- (35) *Sun sa tôlô ô ê
 he (resp.) be silly EMPH EMPH
 ‘He is silly.’

Therefore, one is forced to conclude that the syntax of Neg2 is less peripheral than the syntax of clause-typing markers, which lines up with the fact that the latter items scope over the whole proposition, whereas the pattern Neg1...Neg2 does not scope over the subject in a basic negative clause (S-NEG-V-O-NEG).

At this point, it is therefore useful to very briefly address some of the analyses proposed for sentence negation. In the first place, the argumentation so far rules out the possibility to subsume sentence negation in Santome under the Neg-Criterion (Haegeman 1995), since this theory relies on a [Spec,Head]-relation (e.g. French *ne...pas*). Another common approach to sentence negation is couched in a long tradition that starts with Chomsky’s (1957) treatment of *do*-support as Aff(irmative), which decades later became the basis of Laka’s (1994) SigmaP (Σ P). In this tradition, Zanuttini (1994) proposes two functional projections to encode negation: NegP and PolP. In the original proposal by Zanuttini, the negation marker is generated as the head of NegP and moves to Pol⁰ in order to check polarity features. If [Spec,NegP] is filled, the negative specifier becomes stranded in post-verbal position after verb movement takes place. This type of analysis is of course unable to account for Santome, since Neg1 and Neg2 are both heads and the language lacks verb movement (Hagemeijer 2007).

The PolP analysis has been adopted by several authors. Oosthuizen (1998) and Biberauer (2007) for instance, argue that in Afrikaans, which exhibits similarities with the negation patterns found in Santome, Neg2 heads PolP, a projection in the left-periphery. Haegeman (2002) returns to the question of higher functional projections and polarity by postulating a PolP in the structure of West Flemish negative sentences. More specifically, she (2002b) challenges the Neg-Criterion by hypothesizing that WF *en-* heads PolP as a sentential negation reinforcement strategy. It follows that this gives rise to a dependency between PolP and the lower NegP. Haegeman provides several pieces of evidence in support of the emphatic and polar function associated with WF *en-*. To a different extent, Neg2 in Afrikaans can also be related to polarity. As Biberauer (2007) points out, Neg2 (*nie*) in this language is activated by (non)veridical operators (e.g. Giannakidou 1998).

It follows that Santome is quite distinct from WF and Afrikaans, because *fa* does not appear in polar contexts: it is not related to emphasis nor is it in any sense conditioned by veridicality. Neg1 and Neg2 in Santome are exclusively related to standard sentence negation.

In more recent literature, however, a new approach to Neg2 has been sketched for a couple of languages. The basic idea of this approach is that not every language with discontinuous negation exhibits the Specifier-Head relation

that has been typically assumed for French. For some languages of the Gbe cluster (Aboh 2004, *forthc.*) and in Afrikaans (Oosthuizen 1998, Molnárfi 2002, Bell 2004), it has been argued that both negative elements should be treated as heads, calling therefore into question the classic Spec-Head analysis.

In particular, Bell (2004) and (Aboh 2004, *forthc.*) propose a new approach whereby Afrikaans and some languages of the Gbe cluster exhibit two NegPs in clause structure, each of which is headed by a negation marker. Although the details of their analyses vary, they both assume that Neg2 heads a NegP, which I label NegP2, that sits higher in the clause than the NegP (NegP1) hosting Neg1. Pied-piping of clauses to [Spec, NegP2], with remnant movements in the case of Afrikaans¹³, derives the correct surface structure. In the spirit of Rizzi (1997), Aboh proposes that NegP2 is a functional projection in the low left periphery.

This type of analysis is problematic for Neg2 in Santome, since *fa* is inherently specified for negation and entertains with Neg1 a relation of head agreement at distance. Therefore, if NegP2 projects in a pre-subject position, this entails that Neg2 scopes over the subject, while subjects in standard sentence negation should typically be outside of the scope of negation.

5. An alternative analysis

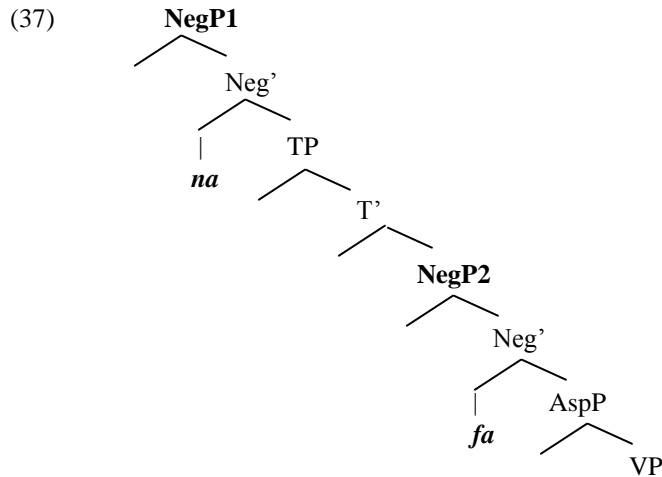
Zanuttini (1997: 74) proposes that NegP in Piemontese, an Italian dialect, can occur in several structural positions in the clause. Like PolP, the highest NegP dominates TP and hosts the presuppositional negation marker (*pa*), whereas the lower NegP is dominated by TP and hosts the non-presuppositional negation marker (*nen*).¹⁴ Moreover, the label PolP is deliberately not used in this work. Although two positions for NegP are acknowledged, they were originally conceived to account for structural variation. Yet, there are cases where *pa* and *nen* are able to co-occur, as illustrated in (38).

¹³ Bell proposes remnant movement to explain the fact that complement clauses (CPs) and PPs in Afrikaans can occur to the right of Neg2.

¹⁴ According to Zanuttini (1997: 67), the non-presuppositional negation marker “(...) negates a proposition without any particular discourse status”. She further claims that presuppositional negation markers sometimes behave like the default negation marker and that the non-presuppositional negation markers sometimes are presuppositional. This arguably reflects the development of the stages of Jespersen’s cycle (e.g. Schwegler 1990).

- (36) Fa **pa** **nen** sulì! (Piedmontese from Lanzo; Zanuttini 1997: 75)
do NEG NEG that
'Don't do that!'

The spirit of this analysis can be adjusted to double-headed negation languages by stipulating that both NegPs are obligatory in these languages and sit within the I-system (corresponding to the TMA-system of creole languages). More specifically, I argue that the NegP headed by Neg2 (*fa*) in Santome projects between TP and AspP¹⁵, yielding the following abbreviated structure:



The correct surface order is obtained by raising AspP and the structure it contains to [Spec,NegP2]. Under this analysis, Neg2 doesn't scope over the subject. The relevant operations take place below the subject position. AspP-raising accounts for all the contexts and crucially provides the relevant contrast in the data between peripheral and non-peripheral material¹⁶: arguments, complement clauses and VP/AspP-adjuncts fall within the scope of clausal negation, since they are pied-piped into [Spec,NegP2]; high adjuncts, such as CPs, are not affected by AspP-raising and therefore fall outside the scope of clausal negation.¹⁷ In the remainder of this paper, I will

¹⁵ For a detailed discussion of Santome's TMA-system, I refer the reader to Hagemeijer (2007).

¹⁶ This distinction has a longstanding tradition. I refer the reader to Lobo (2002, 2003) for discussion of peripherality in European Portuguese and an overview of the relevant literature.

¹⁷ An anonymous reviewer asks what triggers AspP-raising. Although I have no final answer to this question as yet, it should be noticed that aspect, unlike tense, behaves like a bound morpheme on the verb (Hagemeijer 2007), warranting the treatment of AspP and VP as a unit. Furthermore, it is suggestive that the raising operation takes

present additional evidence from durational adjuncts and coordination structures in support of a distinction based on peripherality.

5.1. Durational adjuncts

As illustrated in section 2.1, this type of adjuncts differs from other adverbs in the sense that they are able to occur to the right of *fa* when they are not in the scope of negation. In the following sentences, the a. example in (38-40) shows the adjunct in the position where it immediately precedes Neg2 and in the b. example it follows Neg2.

- (38) a. Zon **na** ka ba Lisboa [tlêxi somana] **fa**.
 Zon NEG ASP go Lisbon three week NEG
 ‘Zon doesn’t go to Lisbon for (a period of) three weeks.’
 *‘For three weeks, Zon doesn’t go to Lisbon.’
 b. Zon **na** ka ba Lisboa **fa** [tlêxi somana].
 ‘For three weeks, Zon doesn’t go to Lisbon.’
 *‘Zon doesn’t go to Lisbon for (a period of) three weeks.’
- (39) a. Zon **na** ka tlabá [tudu plaman] **fa**.
 Zon NEG ASP work every morning NEG
 ‘Zon doesn’t work every morning.’ (just some mornings)
 *‘Every morning, Zon doesn’t work.’
 b. Zon **na** ka tlabá **fa** [tudu plaman].
 ‘Every morning, Zon doesn’t work.’
 *‘Zon doesn’t work every morning.’ (just some mornings)
- (40) a. A **na** da mu kume [jina plaman] **fa**.
 IMP NEG give 1SG eat since morning NEG
 ‘They didn’t provide me food since the morning.’
 b. A **na** da mu kume **fa** [jina plaman].
 ‘They didn’t provide me food since the morning.’

In example (38), the adjunct *tlêxi somana* ‘for three weeks’ can only be interpreted in one way according to its position to the left or the right of negation marker *fa*. The b. example would have the same reading if the adjunct occurred in pre-subject position. Example (39) confirms these findings and shows that the quantifier *tudu* ‘every’ exerts scope over negation when the adjunct occurs to the right of *fa*. When it occurs to its left, the only available interpretation is that of negation exerting scope over the adjunct.

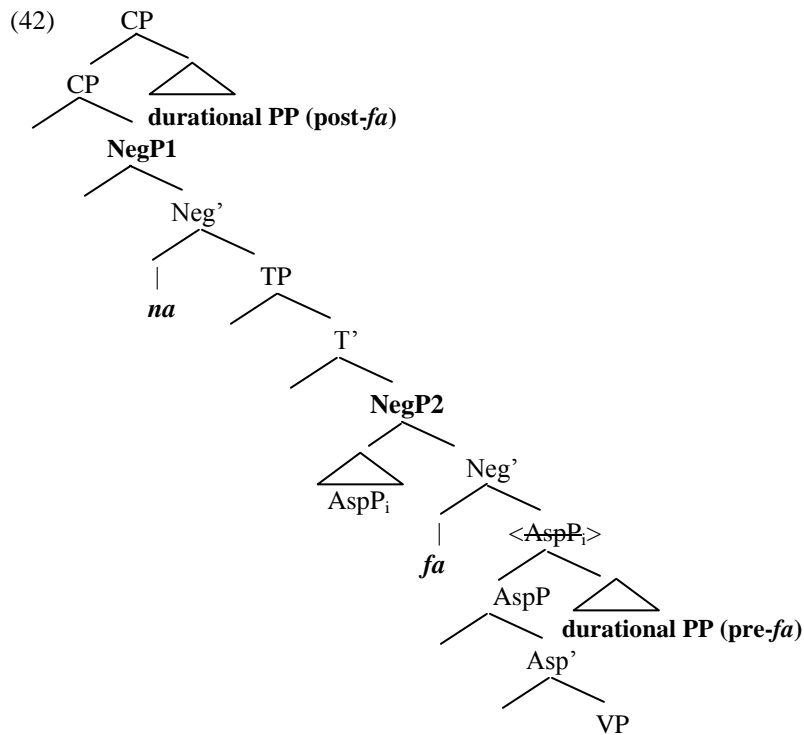
When a durational adjunct is headed by the prepositions *jina* ‘since, from’ (and *antê* ‘until’), as in (40), the difference between the pre-*fa* and post-*fa* position is less obvious. However, it can be shown that contrastive focus can

place to create a matching relation (Spec-Head) between the final marker and AspP, thereby delimiting the negative domain.

only operate on those elements that are within the scope of negation. For that reason, the adjunct *antê taji* in (41a) below can indeed be contrastively focused, whereas (41b) cannot and therefore yields an ungrammatical sentence. In (41c) the verb is in the scope of negation and can thus be under focus. This leads to the conclusion that negation in Santome is sensitive to the relation between scope and focus.

- (41) a. Ê **na** ka ba kume antêplaman **fa**, maji antê taji.
 3SG NEGASP go eat untilmorningNEGbut until afternoon
 ‘He doesn’t eat until the morning but until the afternoon.’
 b. *Ê **na** ka ba kume **fa** antê plaman, maji antê taji.
 c. Ê **na** ka ba kume **fa** antê plaman, maji bêtê.
 ‘He doesn’t eat until the morning but he does drink.’

In the light of the distribution of the durational phrases above, I propose the structure in (42), assuming with Ernst (2002) that right-adjunction is allowed, with two possible loci of adjunction for the durational PP.¹⁸



¹⁸ A similar proposal has, for instance, been made by Johnston (1993) for *because*-clauses in English.

In this representation, durational adjuncts that pattern to the right of *fa* are merged as high right-adjuncts, arguably to CP. I do not consider NegP1 an adjunction site for these adjuncts, because in the presence of a focused constituent, the adjunct cannot be stacked between FocP and NegP1, as illustrated in (43).

- (43) (Tlêxi somana), [Lisboa]_i so (*tlêxi somana) Zon **na** ka
 (three weeks) Lisbon FOC (three week) Zon NEGASP
 be [-]_i **fa**.
 go NEG
 ‘For three weeks, Zon doesn’t go to LISBON.’

I further assume that the same adjunct occurring to the left of *fa* is merged to AspP, which is then moved within the I-system to [Spec,NegP2], yielding the correct surface order.

5.2. Coordination

Another interesting and complex domain of negation in Santome are negative coordination structures, which provide further insight into the way Neg2 interacts with clause structure. The preverbal negation markers *na* may enter syndetic or asyndetic negative coordination. In any of these structures, the subject may or not be overtly realized in the second conjunct. Note that the clauses are conjoined by *nê*, which exhibit a special polar behaviour (cf. Hagemeijer 2007). The most significant aspect of the coordination structures in (44-45) in connection with negation is the fact that discontinuous negation has to be repeated in each conjunct.

Syndetic negative coordination

- (44) Bô **na** tê mwala **fa** nê (bô) **na** tê mina **fa**.
 2SG NEG have woman NEGCONJ (2SG) NEGhave child NEG
 ‘You don’t have a wife nor children.’

Asyndetic negative coordination

- (45) Bô **na** tê mwala **fa** (bô) **na** tê mina **fa**.
 ‘You don’t have a wife nor children.’

Importantly, in these structures each conjunct has to be independently negated. It is impossible to postpone *fa* until the second conjunct:

- (46) *Bô na tê mwala (bô) na tê mina fa.

As expected, arguments cannot be extracted out of the conjuncts, in agreement with Ross’ (1967) Coordinate Structure Constraint.

- (47) a. *[Mwala]_i so bô naxi tê [-]_i fa bô naxi tê mina
 wife FOC 2SG NEG have NEG 2SG NEG havechild
 fa.
 NEG
- b. *[Mina]_i so bô naxi tê mwala fa bô naxi tê [-]_i fa.

However, things are different when coordination is established at VP-level, as illustrated in (48) and (49). Note that in these examples the conjunction *nê* is required.

- (48) Zon **na** ka [da nê lêsêbê] plêsêntxi **fa**.
 Zon NEG ASP give nor receive gift NEG
 ‘Zon doesn’t offer nor receive gifts.’
- (49) Zon **na** tava [kloga nê kyê] **fa**.
 Zon NEG TNS slip CONJ fall NEG
 ‘Zon had not slipped nor fallen.’

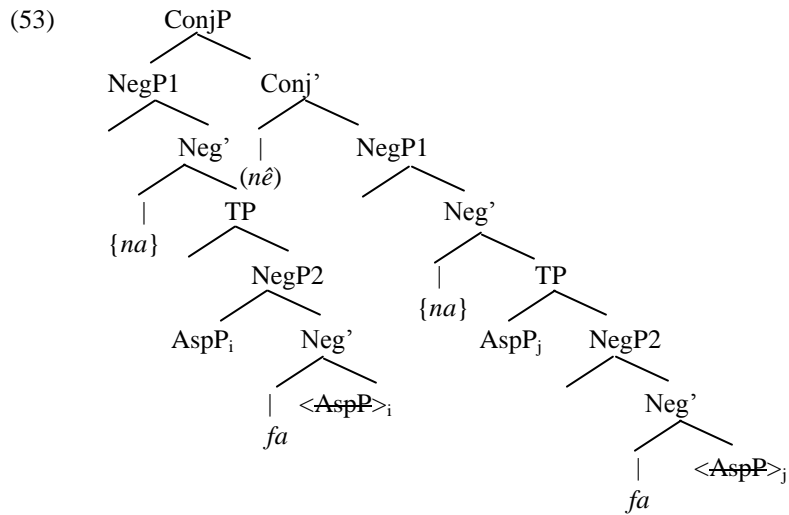
In these examples, VP-coordination only requires a single final Neg2 and not independent negation for each domain. As expected, when the coordination is even lower, for instance at DP-level, an identical relation holds, since sentence negation does not, obviously, look inside these constructions.

- (50) Zon **na** mata [zuxi nê avogadu] **fa**.
 Zon NEG kill judge CONJ lawyer NEG.
 ‘Zon didn’t kill the judge nor the lawyer.’

Furthermore, tense and aspect markers cannot establish a coordination.

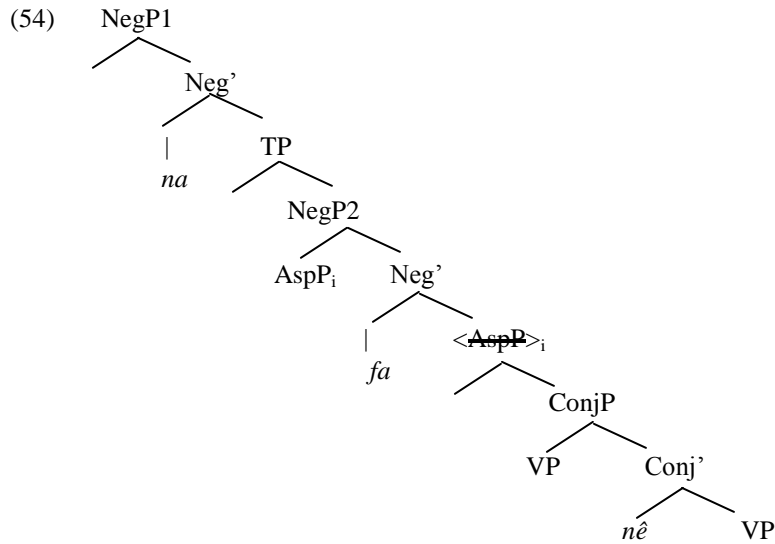
- (51) *Zon na ka da nê ka lêsêbê plêsêntxi fa.
 Zon NEG ASP give CONJ ASP receive gift NEG
- (52) *Zon na tava kloga nê tava kyê fa.
 Zon NEG TNS slip CONJ TNS fall NEG

As is standardly accepted, I assume that coordination can be established at different levels (IP, VP, DP, etc.) and that a ConjP projects in the syntactic structure at the relevant level (e.g. Johannessen 1998, Colaço 2005). ConjP (Conj°) is headed by the conjunction or left empty in the case of asyndetic coordination. The first conjunct, the one that surfaces before the conjunction, sits in [Spec,ConjP], whereas the second conjunct is the complement of ConjP. The following reduced tree structure shows the workings of a high coordination.



Coordination is established at the level of NegP. Arguably, the subject of each conjunct is housed in [Spec,NegP]. Since each conjunct projects the I-system, including NegP2, which sits between TP and AspP, AspP-raising is an operation that takes place in each conjunct to derive the correct surface order of the clause. Therefore, the prediction that each conjunct has independent full-fledged negation is fulfilled. Note further that this structure also correctly predicts that extraction from each conjunct is precluded.

On the other hand, coordination at a lower level in a negative sentence, for instance between VPs, is represented as follows.



Here, ConjP crucially occurs below the I-system hosting NegP2. Raising of AspP and everything it contains to [Spec,NegP2] correctly predicts that the discontinuous negation pattern projects only once, exerting scope over both VPs. This structure also correctly predicts that extraction from the VP is grammatical, as illustrated by the extraction in (55b) from the original sentence in (55a):

- (55) a. Zon **na** bili poto nê fisa **fa**.
 Zon NEG open door CONJ close NEG
 ‘Zon didn’t open nor close the door.’
- b. [Poto]_i so Zon **na** bili [-]_i nê fisa [-]_i **fa**.
 door FOC Zon NEG open CONJ close NEG
 ‘Zon didn’t open nor close THE DOOR.’

It follows that extraction applies across-the-board in this example. In sum, negative coordination structures provide additional evidence for the distinction between peripheral and non-peripheral adjuncts.

6. Conclusion

It was shown in this paper that Santome exhibits a sentence negation pattern consisting of two negative heads that stand in an Agree at distance relation. I have argued that Neg1 (*na*) heads a ‘regular’ NegP that sits on top of the TMA-material, whereas Neg2 (*fa*) projects slightly lower in the clause, within the TMA-domain, where it also heads a NegP. I have determined the locus of Neg2 through its interaction with arguments and adjuncts. In fact, it turns out that the peripherality of adjuncts is crucial to our understanding of *fa*. The claim that NegP2 occurs between TP and AspP and that AspP is raised to [Spec,NegP2] elegantly explains away with all the contrasts found: low adjuncts, which occur to the left of *fa*, raise across Neg2; high adjuncts are not affected by AspP raising and therefore occur to the right of Neg2. In other words, in surface structure Neg2 does not reach into these domains.

A final note is in place in connection with the typology of negation. As mentioned, Santome exhibits a typologically marked sentence negation pattern, which also extends to the typology of creole languages. In fact, these negation patterns are not accounted for in the detailed proposal by Zeijlstra (2004). Nevertheless, it can be argued that this language represents a subtype of the small set of Jespersen’s Cycle Phase III languages.

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