

## Sentential Negation and Verb Movement in Bantu Languages\*

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### 0. Introduction

This paper explores a well-known asymmetry between negation marking main clauses and subordinate clauses in Bantu languages (Güldemann 1999:551, Meeussen 1967:114). It is noted that pre-initial negation marking is usually restricted to main clauses, while post-initial marking is rarely restricted. Various studies have explored the diachronic origins of the various strategies. This paper focuses on how the strategies are constrained by clause structure. It is argued that negation projects a NegP as an element of Infl. Asymmetrical negation marking is due to two NegPs, one selecting TP, and the other selected by TP.

The paper is organized into five sections. Section 1 presents examples of strategies of marking negation in main clauses, while Section 2 contains examples of negation in relative clauses. Section 3 discusses verb movement to C° and Section 4 proposes an analysis of NegPs. Section 5 concludes the discussion.

### 1. Strategies of Marking Negation in Main Clauses

Bantu languages exhibit a wide range of negation marking strategies in matrix clauses. Most languages mark negation by means of an affix on the verb. Affixal negation markers are located in one or two slots on the Bantu verbal template.

(1) Elements of the Bantu Verb (adopted from Meeussen 1967:108)

	Pre-initial	Initial	Post-initial	Tense & Aspect	Infix	Stem	Final	Post-final
Function	REL/NEG	SM	NEG	TNS/ASP	OM	Verb	ASP	NEG
Negation	+		+					+

The three slots for negation marking together with independent negative words derive six strategies of marking negation in main clauses as illustrated below.

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(i) Preverbal particle as in Hung'an H.42 (Takizala 1972:127)<sup>1</sup>

- (2)            lo    i-meen kiti<sup>2</sup>  
                   NEG I-saw 7-chair  
                   'I didn't see the chair.'

(ii) Pre-initial Affix as in Luba L.31 (Yukawa 1992:309, 317)

- (3)    a.        tw-áka-mu-p-a  
                   we-PT-1OM-give-FV  
                   'we gave him/her'  
        b.        ká-tw-aká-mú-p-a  
                   NEG-we-PT-1OM-give-FV  
                   'we did not give him/her'

(iii) Post-initial Prefix as in Nyakyusa (Ngonyani personal notes)

- (4)    a.        tw-a-piy-ile  
                   We-PT-cook-PF  
                   'We cooked.'  
        b.        tu-ka-a-piy-ile  
                   we-NEG-PT-cook-PF  
                   'We did not cook.'

(iv) Post-final Suffix as in Nkoya L.62 (Yukawa 1987:138)

- (5)    a.        na-mon-ene  
                   I-see-PT  
                   'I saw.'  
        b.        ná-mon-eně-ha  
                   I-see-PT-NEG  
                   'I did not see.'

<sup>1</sup> A letter and a number after the name of a language refer to the reference number assigned in Guthrie's 1968-71 classification of Bantu languages.

<sup>2</sup> Abbreviations:

CON	Conditional Marker	DEM	Demonstrative	FV	Final Vowel
FT	Future Tense	INF	Infinitive Marker	NEG	Negation
OM	Object Marker	PF	Perfective Marker	PT	Past Tense
REL	Relative Marker	SM	Subject Marker	SUBJ	Subjunctive Marker

The numbers in the glosses stand for noun classes.

(v) Post-verbal Particle as in Ngoni P.13 (Ngonyani field notes)

- (6) a. m-geni<sub>i</sub> a- tol-ili u-gimbi  
1-guest 1SM-take-PF 14-beer  
'The guest took beer.'
- b. m-geni a- tol-i lepa u-gimbi  
1-guest 1SM-PT-take-FV NEG 14-beer  
'The guest did not take beer.'

(vi) Pre-initial Prefix + Affix as in Modern Standard Swahili G.42<sup>3</sup>

- (7) a. tu-li-ondok-a  
we-PT-leave-FV  
'We left.'
- b. ha-tu-ku-ondok-a  
NEG-we-NEG+PT-leave-FV  
'We did not leave'

The nature of double marking of negation as found in Swahili, Zulu (S.42), Luvale (K.14), Venda (S.21) and other languages is not discussed in this paper and is deferred to future research.

The interesting feature is that when it comes to relative clauses, languages exhibit the same patterns. For example, languages with preverbal negative particles have periphrastic negative markers in relative clauses regardless of whether they are closely related or not. The patterns of negation in relative clauses are presented in the following section.

## 2. Negative Marking Strategies in Relative Clauses

The wide range of strategies is narrowed in relative clauses as shown in this section. Using the sample languages cited in the preceding section, we notice some interesting restrictions.

In root clauses, Hung'an negation is marked by a preverbal negative particle. In relative clauses, negation is marked with a periphrastic element that is inflected for tense and subject agreement. The same applies to Mbukushu (K.43).

- (8) a. kit ki a-swiim-in Kipes zoon (Takizala 1973:128)  
7chair 9REL 1SM-buy-PT Kipese yesterday  
'the chair that Kipese bought yesterday'
- b. kit ki a-khoon-in Kipes ku-suom  
7chair 7REL 1SM-fail-past Kipese INF-buy  
'the chair that Kipese didn't buy'  
\*kit ki lo a-swiim-in Kipes

<sup>3</sup> Standard Swahili examples are provided by the author.

The negative marker appears between the relative marker and the subject of the relative clause.

Luba and languages such as Ganda (J.15), Haya (J.22), Shambala (G.23) and Nyoro-Tooro (J.11) mark negation in pre-initial morphological slot in main clauses, but use the post-initial slot in relative clauses as shown the Luba example below.

- (9) a. mú-úntú ú-twa-aká-biik-íle (Yukawa 1992:341)  
 1-person 1REL-we-PT-call-PF  
 'the person whom we called'
- b. mú-úntú ú-tu-di-ká-tu-yi-biik-íle  
 1-person 1REL-we-NEG-PT-we-3OM-call-PF  
 'the person whom we did not call'

Languages that use the post-initial slot in matrix clauses, such as Pangwa (G.64), Lozi (K.21), and Tuki (A.64), use the same strategy in the relative clauses as illustrated with Nyakyusa below.

- (10) a. un-dindwana u-yo a-piy-ile mbatata (Ngonyani field notes)  
 1-girl 1-REL 1SM-cook-PF 10potato  
 'the girl who cooked potatoes'
- b. un-dindwana u-yo a-ka-piy-ile mbatata  
 1-girl 1-REL 1SM-NEG-cook-PF 10potato  
 'the girl who did not cook potatoes'

The negative marker is in the post-initial slot, the same as in the matrix clauses.

It was noted that Nkoya marks negation by means of a postfinal marker in the main clause. In relative clauses, Nkoya marks negation by means of an inflected auxiliary word.

- (11) a. mu-ntu é-mon-ené (Yukawa 1987:161)  
 1-person 1REL-see-PT  
 'a person whom he saw'
- b. mu-ntu bá-bul-ilé ku-môn-a  
 1-person ?2SM-lack-PF INF-see-FV  
 'the person who they did not see'

The periphrastic negative marker is derived from *kubula* 'to lack'. Languages that use a post-final negation marker in matrix clauses use a periphrastic form in the relative clause.

Kingoni, Kindendeule, and Kimatuumbi mark negation the same way in the root clauses as well as in relative clauses, by means of a postverbal particle.

- (12) a. m-geni mwe-a tol-ili u-gimbi (Ngonyani: field notes)  
 1-guest IREL-ISM-take-PF 14-beer  
 'the guest who took the beer.'
- b. m-geni mwe-a tol-ili lepa u-gimbi  
 1-guest IREL-ISM-PT-take-FV NEG 14-beer  
 'the guest did not take beer.'

The asymmetries show that while there are six different strategies for marking negation in the main clauses, there are only three for relative clauses. In the following sections, I attempt to provide a structural account for the asymmetries.

### 3. V-to-I-to-C

The asymmetry is reminiscent of word order asymmetries found in V2 languages such as Swedish. Consider the position of negation in root clauses and relative clauses in Swedish.

- (13) a. Ulf köpte inte boken (Holmberg and Platzach 1995:45)  
 Ulf bought not the-book
- b. att Ulf inte köpte boken  
 that Ulf not bought the-book

In the root clause (13a), the negative appears after the verb while in the subordinate clause (13b), the negative marker appears before the verb. This asymmetry is accounted for by verb movement to C° in matrix clauses, while in the subordinate clause C° is filled by the complementizer. Therefore, the verb does not move to C° in the subordinate clause. In languages where there is no V movement to C° such as English, there is no asymmetry between negation in main clauses and subordinate clauses. The negation marker appears between the auxiliary and the verb in both clauses.

A good starting point for Bantu languages, therefore, is to investigate the contrast between languages that have verb movement to C° and those that do not have such movement. Based on evidence from VP ellipsis and VP adverbs in Swahili and Ndendeule<sup>4</sup>, Ngonyani (1996, 2000) argues that the verb moves to Infl. Demuth & Harford (1999) find evidence of verb movement to C in object relative clauses of several Bantu languages. They show that Bantu languages with independent relative markers do not exhibit subject-verb inversion, while languages with an affixal relative marker do as the following contrast between Sotho (14a) and Shona (14b) shows (Demuth & Harford 1999:42).

- (14) a. Setula seo basadi ba-se-rek-ile-ng kajeno  
 7chair 7REL 2women 2AGR-7OBJ-buy-PERF-RL today  
 'the chair which the women bought today'

<sup>4</sup> Not classified by Guthrie (1967-71) but its closest relative is Ngindo (Ngonyani 2001a).

- b. Mbatya dza-v-aka-son-era vakadzi mw-enga  
 10clothes 10REL-2AGR-TN-sew-APL 2women 1bride  
 'clothes which the women sewed for the bride'

The SV order is maintained in Sotho where the relative marker is an independent word, while in Shona, where the relative marker is an affix, there is subject-verb inversion. Assuming that the relative marker occupies C° in Sesotho, there is no movement of the verb because the landing site is occupied. In (14b), however, the position is empty and subsequently filled by the verb.

It is tempting to hypothesize that in languages without subject-verb inversion (that is languages without verb movement to C°), there will be no asymmetry between main clauses and relative clauses because the verb does not have to cross Neg. This, however, is not borne out, as the following example from Ganda shows.

- (15) Omusajja Petero gwe a-labye mu-somesa (Walusimbi 1996:37)  
 man Peter REL 1SM-see-PF 1-teacher  
 'The man that Peter has seen is a teacher.'

This example of object relativization shows two important features of Ganda relative clauses: (a) an independent word for a relative marker, and (b) no subject-object inversion. These two facts suggest there is no verb movement to C°. However, negation marking is asymmetrical as the following examples show.

- (16) a. ye a-ta-kol-a (Ashton et. al. 1954:138)  
 1REL 1SM-NEG-work-FV  
 '(he) who does not work'  
 b. ebi-kopo te-byt-ise  
 8-cup NEG-crack-PF  
 'The cups are not cracked.'

Example (16a) shows that the negative marker in the relative clause appears after the subject marker (post-initial) different from what is found in the root verbs (16b), a pre-initial affix. Therefore, the asymmetries cannot be explained in a straightforward manner simply by appealing to V-to-I-to-C.

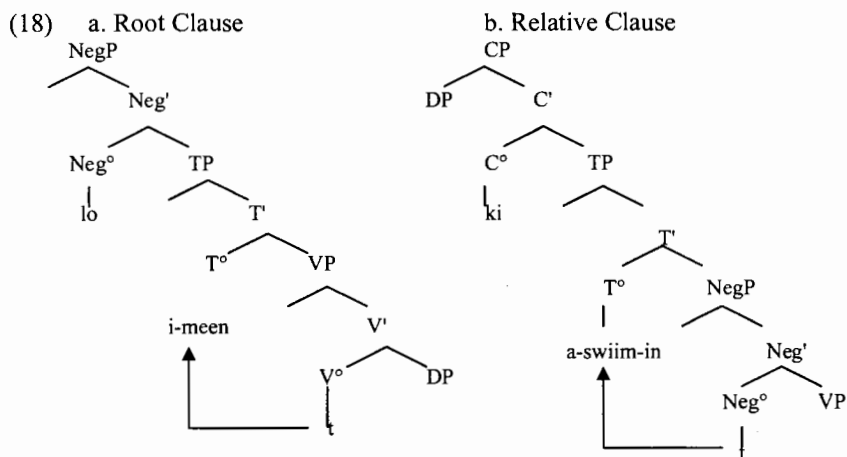
A closer look at the data reveals that in relative clauses, the relative marker is always associated with finiteness and more specifically TP. The relative marker, whether prosodically independent or not, is followed by a subject marker and a tense marker on the verb. Assuming an Agr-less clause structure (Chomsky 1995), we find the relative marker adjacent to the tense marker. This suggests selectional relations between the C of the relative clause and TP. In languages with pre-initial negation or independent particle before the verb in main clauses, the structure cannot be embedded as a relative clause because the C of the relative marker will fail to govern TP. Another strategy is used instead. The selection of

TP by C is very widespread among Bantu languages. Let us consider how this feature accounts for the asymmetries in the various languages.

#### 4. Analysis

The correlation between the tense marker, the relative marker, and the negative marker suggests that Neg blocks government of TP by C°. Therefore, negation projects a NegP which selects TP. In subordinate clauses, the negative marker cannot intervene between the relative marker and the tense marker. The asymmetry between matrix clauses and relative clauses can be characterized as NegP selecting TP in matrix clauses, and NegP selected by TP in relative clauses. This is illustrated in the following abbreviated tree diagrams for Hungan sentences repeated here for verbs cited earlier.

- (17) a. lo i-meen kiti  
 NEG I-saw 7-chair  
 'I didn't see the chair.'  
 b. kit ki a-khoon-in Kipes ku-suum  
 7chair 7REL ISM-fail-past Kipese INF-buy  
 'the chair that Kipese didn't buy'

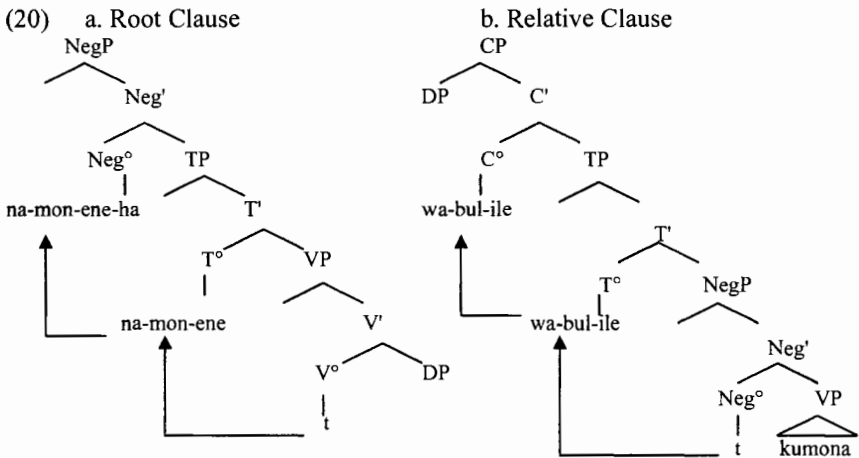


In the matrix clause, Neg appears as the highest Infl which selects TP. This accounts for the preverbal negation *lo*. The verb, which is lower than TP, raises and incorporates onto T in an antisymmetric fashion (Kayne 1994). In the relative clause, however, CP does not select NegP. It selects TP, and negation has to be expressed in the form of a periphrastic marker generated as a verb and raised to T in the regular V-to-I manner.

The inability of the negative marker to license TP is also found in languages with pre-initial negation such as Oruhaya and postfinal negation such as Nkoya. Let us consider Nkoya negation since it requires a periphrastic negative marker in

relative clauses in the same way Hung'an does. In matrix clauses, negation selects TP. This negative marker attracts Tense resulting in the incorporation of the inflected verb to Neg. This explains the appearance of the negative *ha* in verb final position. In relative clauses, however, CP selects TP. NegP between CP and TP blocks this relation. Thus, the regular negation is eliminated and negation is introduced by a negative verb *buli* 'fail'. This is shown in the following pair of tree diagrams.

- (19) a. ná-mon-eně-ha  
I-see-PT-NEG  
'I did not see.'
- b. mu-ntu bá-bul-ilé ku-môn-a  
1-person ?2SM-lack-PF INF-see-FV  
'the person whom they did not see'



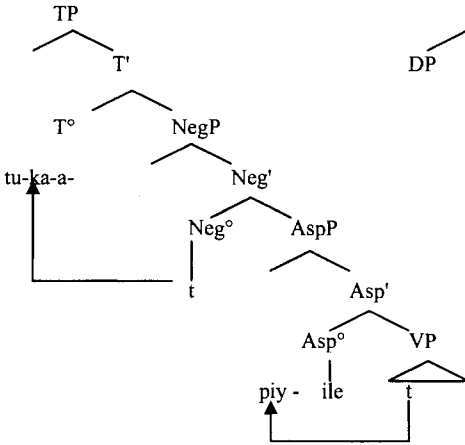
This account provides a simple explanation for the appearance of the negative suffix at the end of the verb phrase as in (20a). In such cases, the entire VP raises to Spec, NegP.

- (21) a. ná-mon-ene-há ngombe  
I-see-PT-NEG 9cow  
'I did not see the cow'
- b. Ná-mon-ene ngombě-ha  
I-see-PT 9cow-NEG  
'I did not see the cow.'

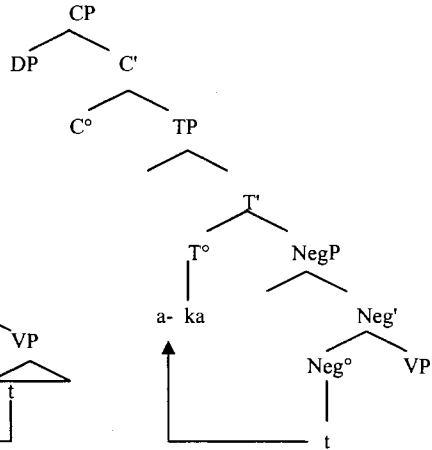


- b. un-dindwana u-yo a-ka-piy-ile mbatata  
 1-girl 1-REL 1SM-NEG-cook-PF 10potato  
 'the girl who did not cook potatoes'

## (25) a. Root Clause



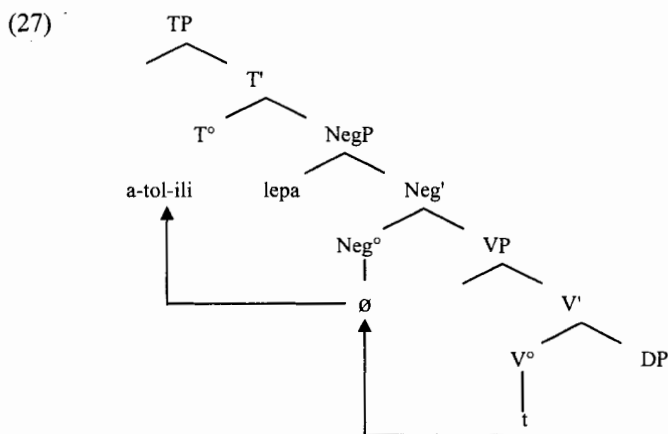
## b. Relative Clause



The post-verbal negative particle does not exhibit the root clause-relative clause asymmetry. Ngonyani (2001b) noted that the negative particle in Ndendeule does not prevent movement of the verb. Assuming Ngonyani's analysis in which the particle is generated higher than the VP in order to have scope over it, more specifically, in the Spec, NegP with an empty Neg°, the structure below is proposed.

- (26) a. m-geni a- tol-i lepa u-gimbi  
 1-guest 1SM-PT-take-FV NEG 14-beer  
 'The guest did not take beer.'
- b. m-geni mwe-a- tol-ili lepa u-gimbi  
 1-guest 1REL-1SM-PT-take-FV NEG 14-beer  
 'The guest did not take beer.'

The verb raises to the empty Neg° and subsequently to T°. As in other Bantu languages, the subject marker is an agreement marker, a feature assigned under Spec-Head configuration. The symmetric negation marking is due to TP selecting NegP in both root and relative clauses.



## 5. Conclusion

To conclude, in section 2, two questions were raised: (a) What is the status of Neg?, and (b) Where is Neg located in the clause structure?

For the first question, data indicate that negation projects a NegP consistent with Pollock's (1989) proposal. This is based on two considerations. One is the selectional relations between Neg and Tense which suggest in most of the languages, the negative markers are Neg. The second consideration is that the asymmetries result from avoiding the root Neg from blocking or preventing C° from governing TP. As for the second question, we find two Neg positions. One NegP selects TP, and the other TP selects NegP. This supports findings in other languages such as Romance where Zanuttini (1997) has observed that several NegPs can be found in the clause structure.

This study made use of data from several languages which are not cited here. However, the analysis presented in 4 predicts the negation marking in them. Further research is needed to determine whether the predictions are borne out in all languages.

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