Brandon Chaperon May 27th, 2022

1 Introduction

- The majority of Bantu languages have two or three strategies for expressing negation (Nurse 2008).
- In Kirundi, there are four different negation morphemes:

	Morpheme	Name	Position	When is it used?
(1)	nti-	primary	pre-verbal	matrix clauses
	si-			exception: 1SG subjects
	ta-	secondary	between SM and TAM	subordinate clauses, A'-movement
	si	negative copula	root	N/A

- It is common in many Bantu languages to have distinct negations for matrix and subordinate clauses (Güldemann 1996; Downing & Marten 2019; Guérois 2019).
- This includes Kirundi, which has *primary* (NEG1) and *secondary* (NEG2) negation:
- (2) Keezá ntiyaguze igitabo Juma atasómye.
 /Keezá nti-a-a-guze igitabo Juma a-t(a)-a-sómye/
 Keezá NEG₁-1S-REC.PST-buy.PFV 7book Juma 1S-NEG₂-REC.PST-read.PFV
 'Keeza did not buy a book that Juma did not read.'
 - The remaining negation morpheme, used as the negative copula, will be irrelevant to the following analysis.

The aim of this project will be to investigate the distinction between *primary* and *secondary* negation in Kirundi.

Outline:

- Background: Distribution of *primary* and *secondary* negation.
- The Structure of Negation:
 - 1. Negation in the Literature: Two Projections.
 - 2. Relative Clauses: Phonologically null relative particle (\emptyset_{REL}) in C.
 - 3. C Selection for Finiteness.
- Illocutionary Polarity:
 - The Conjoint/Disjoint (and Focus)
- Summary & Conclusion

⁰I want to thank our Kirundi consultant Benilde Mizero for his help and collaboration. All errors are my own.

2 Background

- Nurse (2008) gives the following structure for the Kirundi verb:
- (3) $\mathbf{NEG}_1 + SM + \mathbf{NEG}_2 + TA + [OM + [[root + extension] + FV]] + Post-FV$
 - Primary negation is located in the pre-subject marker (Pre-SM) position.
 - Secondary negation is located in the NEG₂ position (or Post-SM).
 - Most of the literature also contrasts these types of negation due to their location relative to the verb root.

2.1 Negation

2.1.1 Primary Negation

- *Primary* negation is located in the pre-subject marker position.
- In most cases, *primary* negation surfaces as the morpheme *nti*-:
- (4) Yohani ntiyafunguye. /Yohani nti-a-a-funguye/ John NEG₁-1S-REC.PST-eat.PFV 'Yohani didn't eat.'
 - When there is a first-person subject, *nti* surfaces as *si*-:
- (5) a. Mu bisanzwe sinfuúnguura imihwi. /mu bisanzwe si-n-fuúngur-a imihwi/ in usually NEG1-1SG.S-eat-FV 4banana 'I usually do not eat bananas.'
 - b. Mu bisanzwe ntafuúngura imihwi. /mu bisanzwe nti-a-fuúngur-a imihwi/ in usually NEG1-1s-eat-FV 4banana 'He usually does not eat bananas.'
 - *nti* appears to dissimilate phonologically to the first-person subject agreement marker *n*.
 - Since this behaviour is phonologically driven, I will treat *nti-* and *si-* the same.

2.1.2 Secondary Negation

- Secondary negation, is located in the NEG₂ position (i.e. post-subject marker position).
- The *ta* prefix can also surface as (Goldsmith & Sabimana 1985):
 - 1. *da-* before a voiceless obstruent, due to *Dahl's law* (voice dissimilation between sequential voiceless stops), and
 - 2. *t* when it occurs before a vowel.
- The most important distinction between this negation and *primary* negation is that the latter cannot be embedded:
- (6) a. *Keezá yaguze igitabo Juma ntiyasómye.
 /Keezá a-a-guze igitabo Juma nti-a-a-sómye/
 Keezá 1s-REC.PST-buy.PFV 7book Juma NEG1-1s-REC.PST-read.PFV

- b. Keezá yaguze igitabo Juma atasómye.
 /Keezá a-a-guze igitabo Juma a-t(a)-a-sómye/
 Keezá 1s-REC.PST-buy.PFV 7book Juma 1s-NEG₂-REC.PST-read.PFV
 'Keeza bought a book that Juma did not read.'
- In addition, *secondary* negation can never surface in matrix clauses. *Primary* negation is used instead:
- (7) a. *Yohani yataguze igitabo /Yohani a-t(a)-a-guze igitabo/ John 1s-NEG₂-REC.PST-buy.PFV 7book
 b. Yohani ntiyaguze igitabo. /Yohani nti-a-a-guze igitabo/ John NEG₁-1s-REC.PST-buy.PFV 7book 'John did not buy a book.'

Concisely, negating a matrix clause requires *primary* negation; *secondary* negation must be used when negating a subordinate clause.

• When negating a sentence involving A'-movement, *secondary* negation must be used instead of *primary* negation:

(8) *Subject extraction:*

a.	*Niindé	ntiyabonye	umugabo?
	/ni-ndé	nti-a-a-bonye	umugabo/
	COP-who	NEG ₁ -1S-REC.PST-See.PFV	1man

b. Niindé atabonye umugabo?
 /ni-ndé a-t(a)-a-bonye umugabo/
 COP-who 1s-NEG2-REC.PST-see.PFV 1man
 'Who did not see a man?'

(9) *Object extraction:*

- a. *Niindé Yohani ntiyabonye?
 /ni-ndé Yohani nti-a-a-bonye/
 cop-who John NEG1-1S-REC.PST-see.PFV
- b. Niindé Yohani atabonye?
 /ni-ndé Yohani a-t(a)-a-bonye/
 cop-who John 1s-REC.PST-NEG₂-see.PFV
 'Who did John not see?'

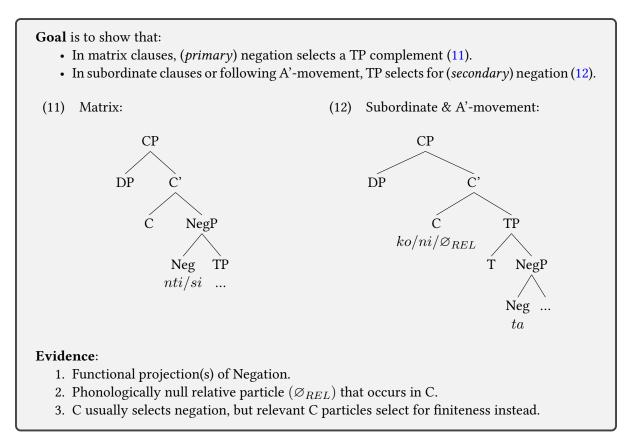
• Additionally, *primary* negation cannot occur inside a relative clause whilst *secondary* negation can:

(Ndayiragije 1999)

Summary:

- The two types of negation mentioned are in complementary distribution:
 - *Primary* negation occurs in matrix clauses.
 - Secondary negation occurs in subordinate clauses or following A'-movement.
- How can we account for this distribution?

3 The Structure of Negation



3.1 Negation in the Literature

Argument: Negation has 2 projections, one that selects a TP and the other that is select by T.

- Based on Kitagawa (1986), Kayne (1989), and Pollock (1989), I will assume that negation heads its own functional projection, where nti/si/ta are heads.
- In Zulu, *primary* negation is said to be in a syntactic head higher than subject marking, towards the top of the inflectional domain (Buell 2011).
- It is also common for languages to have multiple projections for negation (Zanuttini 1997).
- Ngonyani (2002) argues two points specifically relevant to this analysis:
 - 1. One NegP selects for TP.
 - 2. The other is itself selected by TP.

These could explain how primary and secondary negation occur in distinct positions.

3.2 Relative Clauses

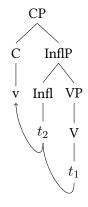
Argument: Kirundi has a phonologically null relative particle (\emptyset_{REL}).

- As with Kirundi, in Haya (Great Lakes Bantu) there are two distinct negation positions and forms.
- One is used in matrix clauses and the other in relative clauses:
- (13) In *Haya*:
 - Abantu ba Kanyigo tibakayombekile shule.
 /abantu ba Kanyigo ti-ba-ka-yombek-ile shule/
 2person of Kanyigo NEG1-2S-RP-build.PFV school
 'Kanyigo people have not built the school.'
 - b. Abataashome tibaasinge mitiani.
 /a-ba-ta-a-shom-e ti-ba-a-sing-e mitiani/
 REL-2S-NEG₂-PST-study-SUBJ NEG₁-2S-PST-pass-SUBJ exams
 'Those who will not study will not pass the exams.'1

(Ngonyani 2002)

• Ngonyani (1996, 2000, 2002) argues that verbs moves to C through Infl in Bantu languages:

(14)



- More specifically, Ngonyani (2002) argues that the verb should move up to C⁰ in relative clauses.
- This can account for Subject-verb inversion (viz. OVS):

(15) In Shona (Shona S.10):

Mbatya dzavakasonera vakadzi mwenga. /mbatya **dza**-v-aka-son-era vakadzi mw-enga á/ 10clothes **10REL**-2s-TN-sew-APL 2women 1bride

'clothes which the women sewed for the bride.'

(Ngonyani 2002)

- The relative marker is always followed by both the subject agreement and tense markers.
- Although, in languages with a relative marker separate from the verb, this inversion construction is not realized.
- The relative marker instead occurs in C^0 on its own without the verb:

¹Note that this is a free relative clause.

(16) In *Sotho* (Sotho-Tswana S.30):

Setula seo basadi baserekileng kajeno. /setula **seo** basadi ba-se-rek-ile-ng kajeno/ 7chair **7REL** 2women 2s-70-buy-PFV-RL today

'the chair which the women bought today'

(Ngonyani 2002)

- Contrarily to Bantu languages like *Sotho*, *Shona*, or *Haya*, Kirundi does not have a relativizer prefix or particle.
- However, the subject-verb inversion construction is still prohibited:
- (17)a. *Ibitabo atasómye_i Yohani t_i biri ku meeza. /Ibitabo a-**t(a)**-a-sómye_{*i*} Yohani bi-ri ku neeza/ t_i 8book 1s-**NEG**₂-REC.PST-read.PFV_i John 8-COP on 9table t_i 'Books that John didn't read are on the table.' b. Ibitabo Yohani atasómye biri ku meeza.
 - /Ibitabo Yohani a-**t(a)**-a-sómye bi-ri ku neeza/ 8book John 1s-**NEG**₂-REC.PST-read.PFV 8-COP on 9table 'Books that John didn't read are on the table.'

I argue that Kirundi has a phonologically null relative particle (\mathscr{D}_{REL}) because verb movement to \mathbf{C}^0 is blocked.

3.3 C Selection for Finiteness

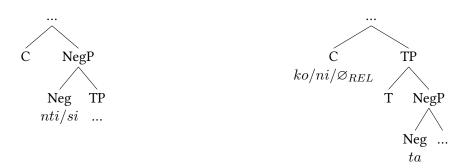
Arguments:

- The following are located in C and select for finitness:
 - 1. *ni* copula (focus clauses and *wh*-questions),
 - 2. subordinate marker *ko*, and
 - 3. null relative particle \emptyset_{REL} .
- I first assume that both the complementizer (*ko*) and copulas (*ni/si*) can be found in the C head based on Gatchalian (2022).
- As with relative clauses, in clauses containing these particles, *secondary* negation must occur:
- (18) Ni ibitabo Yohani ataáguze.
 /ni ibitabo yohani a-ta-á-guze/ **COP** 8book John 1s-NEG₂-REM.PST-buy.PFV
 'It's books John didn't buy.'
- (19) Keezá arázi ko Juma atásomye igitabo. /Keezá a-rá-zi ko Juma a-ta-somye i-gi-tabo/
 Keezá 1s-DJ-know c Juma 1s-NEG₂-read.PFV 7book
 'Keeza knows that Juma didn't read a book.'

- Ngonyani (2002) states that if a NegP is selected by C, "the relative marker will fail to govern TP".
- Thus, I argue that subordinate and copula markers in the C head also have a property which selects for finiteness.
- In the relevant contexts, particles occuring in C⁰ block negation and select for finiteness instead:
 - 1. In both focus clauses and *wh*-questions, the copula *ni* selects a TP.
 - 2. In subordinate clauses, ko also selects a TP.
 - 3. In relative clauses \emptyset_{REL} (null particle) fills the C head and selects for a TP.
 - This strengthens the previous argument for a null relative particle (\emptyset_{REL}).
- When the C head is empty, it can select for a NegP, but when filled by those above, C selects for finiteness instead.

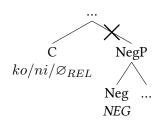
(21)

(20)



- Zanuttini (1996) states that a negation projection can only occur when it selects for a TP as its (obligatory) complement.
- Preferably, negation is selected by C which in turn selects a TP complement.
- In subordinate clauses or following A'-movement, this isn't the case because the C⁰ position is filled with a finiteness selection feature.

(22)



- To solve this, a Neg projection being selected by TP is the only way for negation to occur within these types of clauses.
- This analysis accounts for the distribution of *primary* and *secondary* negation in Kirundi.
- 1. The "default" case is *primary* negation, which occurs to the left of the TP. This Neg head then selects for a TP as its complement.
- 2. In cases where it is not possible, secondary negation must be used as an alternative.

Overall, "the asymmetry between matrix clauses and [the remaining] clauses can be characterized as NegP selecting TP in matrix clauses, and NegP selected by TP [alternatively]" (Ngonyani 2002).

4 Illocutionary Polarity

Arguments:

- 1. *Primary* negation has inherent focus, like the conjoint.
- 2. Secondary negation only involves polarity focus.
- The different locations of these two negations suggests that they are also functionally different.
- Givón (1975) and Horn (1989) argue that in many languages, there are two types of negation.
- In addition, Gibson (2008) states that:
 - *Primary* negation can be associated with denial (i.e. contradiction, opposition, contrast).
 - *Secondary* negation is more of a descriptive (i.e. just stating a fact).
- There are three principle facts about negation in Kirundi, and other Bantu languages, that are relevant to this puzzle:
 - 1. Many in the literature assert that negation has an inherent focus property (Givón 1978; Heine and Reh 1983; Marchese 1983; Hyman and Watters 1984; Güldemann 1996; Güldemann 1999; Güldemann 2007; Scott 2021).
 - 2. In Kirundi, negation cannot occur with the "anti-focus" marker ra- (Ndayiragije 1999).
 - 3. Both *primary* negation and the disjoint cannot be embedded and are incompatible with focus constructions (as well as other types of A'-movement) (Goldsmith & Sabimana 1985; Ntahokaja 1994; Lafkioui et al. 2016).

4.1 The Conjoint/Disjoint (and Focus)

- Kirundi has a conjoint/disjoint distinction:
 - The conjoint is claimed to focus both the verb and the post-verbal element while the disjoint does not (Van der Wal 2015).
 - The disjoint, represented by the *ra*-, is sometimes referred to as the "anti-focus" marker.
- When no post-verbal element is present, the conjoint cannot be used since nothing is being focused (Van der Spuy 1993; Buell 2005; Halpert 2015; Zeller 2021):
- (23) Abáàna baárayanyóòye.
 /abáàna ba-á-*(ra)-ya-nyóòye/
 children 2s-PST-DJ-CL-drink.PFV
 'Children drank it.'

(Ndayiragije 1999)

- According to Ndayiragije (1999), sentences receive a neutral reading when the disjoint is used.
- I reason that, unlike primary negation, the disjoint blocks focus on the post-verbal wh-word.
- In *in situ wh*-questions the disjoint is disallowed:
- (24) Keezá yaguze iki? /Keezá a-a-(*ra)-guze iki/ Keeza 1s-rec.pst-**b**J-buy.pFV what 'What did Keeza buy?'

- In contrast, *primary* negation is compatible with this focus construction:
- (25) Yohani ntiyabóonye nde? /Yohani nti-a-a-bóonye nde/ John NEG1-1S-REC.PST-see.PFV who 'Who did John not see?'
 - Nonetheless, the disjoint and *primary* negation appear in the similar contexts (i.e. only in matrix clauses without A'-movement), but in different structural positions.
 - Despite this, they cannot co-occur:
- (26) a. Abáana baáranyóoye amatá. /abáana ba-á-ra-nyóoye amatá/
 2child 3s-REM.PST-DJ-drink.PFV 6milk
 'Children drank milk.'
 - b. Abáana ntibaányóoye amatá. /abáana nti-ba-á-nyóoye amatá/
 2child NEG1-3S-REM.PST-drink.PFV 6milk
 'Children didn't drink milk.'
 - c. *Abáana ntibaáranyóoye amatá. /abáana nti-ba-á-ra-nyóoye amatá/
 2child NEG1-3S-REM.PST-DJ-drink.PFV 6milk

(Ndayiragije 1999)

- An interpretation is that *primary* negation is structurally similar to the conjoint particle.
- Both of them act as focus markers for elements lower in the phrase.
- Furthermore, we showed that negation is located either directly above or below TP, so negation *c-commands* the disjoint.
- Equivalently, negation scopes over the VP-internal and VP-external positions (Buell 2008).

I argue that *primary* negation does not license a neutral interpretation and this is why it cannot appear with the disjoint marker.

4.2 Problem

- One potential problem with this analysis is that negation could have an anti-focus or "neutral" interpretation too.
- As stated in Nshemezimana & Bostoen (2017), "negation fulfils exactly the same function as the *-ra-/-a-* morpheme, only negatively":
- (27) Yohani ntiyásomye ibitabo bibiri. /Yohani nti-a-á-somye ibitabo bibiri/
 John NEG1-1S-REM.PST-read.PFV 8book 8two
 a. 'John didn't read two books.'
 b. 'John didn't read two books (he read only one).' (Ndayiragije 1999)
 - Regardless, some languages are averse to negation not focusing anything at all (Güldemann 1999).

- Negation must at least "single out the verb lexeme itself or an operator expressing polarity, time, aspect, or modality" (Nshemezimana & Bostoen 2017).
- In Zulu, object marking on the verb "allows focus to be placed on the polarity of the sentence" instead (Zeller 2021).
- Zeller (2021) assumes that negation minimally involves polarity focus.

I argue that both negations still have this focus property.

- 1. *Primary* negation focuses the verb and its post-verbal element.
- 2. Secondary negation focuses only the verb and its polarity.

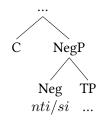
5 Summary

5.1 The Structure of Negation

In this presentation, I provided an analysis that accounts for the distribution of negation in Kirundi.

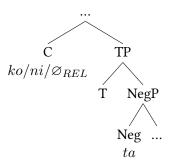
- Negation prefers to select a TP complement, so an empty C head first selects a NegP complement.
- Then, the negation head can select its obligatory TP complement (28).

(28)



- In cases where the CP head is filled, it selects a TP complement instead.
- As a result, a NegP can subsequently only appear by being selected by the TP (29).

(29)



5.2 Illocutionary Polarity

I then showed a preliminary analysis linking negation to focus for 3 principle reasons:

- 1. Many in the literature argue that negation has inherent focus.
- 2. Negation is incompatible with the "anti-focus" marker *ra*-.
- 3. Both *primary* negation and this "anti-focus" marker cannot be embedded and are incompatible A'-movement.

I argued that:

- 1. *Primary* negation focuses the verb and its post-verbal element.
- 2. *Secondary* negation focuses only the verb and its polarity.

Thus, Kirundi appears to have the same distinction present in many (Bantu) languages.

References

- Buell, Leston Chandler. 2008. "VP-Internal DPs and Right-Dislocation in Zulu." *Linguistics in The Netherlands* 25:37–49.
- Buell, Leston Chandler. 2011*a*. "What the Bantu languages can tell us about word order and movement." *Lingua*.
- Buell, Leston Chandler. 2011b. "Zulu ngani 'why': postverbal and yet in CP." Lingua.
- Class Blog. 2022. "LING 415/LING 610: Kirundi Field Methods Class Blog.". URL: https://lingspace.org/fm2022/
- Demuth, Katherine and Carolyn Harford. 1999. "Verb Raising and Subject Inversion in Bantu Relatives." *Journal of African Languages and Linguistics* 20.
- Downing, J, Laura and Lutz Marten. 2019. "Clausal morphosyntax and information structure." *The Bantu Languages*.
- Gatchalian, Terrance. 2022. What's in a copula? (or, What's a copula in?): Non-verbal predication in Kirundi.
- Gibson, Hannah, Andriana Koumbarou, Lutz Marten and Jenneke van der Wal. 2016. *3. Locating the Bantu conjoint/disjoint alternation in a typology of focus marking.* De Gruyter p. 61–99.
- Givón, Thomas. 1978. "Negation in language: Pragmatics, function, ontology." On understanding grammar 18:59–116.
- Goldsmith, John Anton and Firmard Sabimana. 1985. "The Kirundi verb.".
- Güldemann, Tom. 1995. "Verbalmorphologie and Nebenprädikationen im Bantu. Eine Studie zur funktional motivierten Genese eines konjugationalen Subsystems." *Bochum-Essener Beiträge zur Sprachwandelforschung* 27.
- Guérois, Rozenn. 2019. "Cuwabo P34." The Bantu Languages .
- Güldemann, Tom. 1999. "The genesis of verbal negation in Bantu and its dependency on functional features of clause types." pp. 545–587.
- Güldemann, Tom. 2007. "Preverbal objects and information structure in Benue-Congo." pp. 83-111.
- Heine, Bernd and Mechthild Reh. 1983. "Diachronic observations on completive focus marking in some African languages." *Sugia: Sprache und Geschichte in Afrika* 5:7–44.
- Horn, Laurence R. 1989. "A natural history of negation.".
- Hyman, Larry M and John R Watters. 1984. "Auxiliary focus." *Studies in African linguistics* 15(3):233-274.
- Lafkioui, Mena, Ernest Nshemezimana and Koen Bostoen. 2016. "Cleft Constructions and Focus in Kirundi." *Africana Linguistica* 22:71–106.
- Marchese, Lynell. 1983. "On assertive focus and the inherent focus nature of negatives and imperatives: evidence from Kru.".
- Ndayiragije, Juvénal. 1999. "Checking Economy." Linguistic Inquiry 30(3):399-444.
- Ngonyani, Deo. 1996. The Morphosyntax of Applicatives PhD thesis.
- Ngonyani, Deo. 2000. "VP ellipsis in Kindendeule." Kulikoyela Kahigi, Yared Kihore, & Maarten Mous (eds.) Languages of Tanzania pp. 215–232.
- Ngonyani, Deo. 2002. "Sentential Negation and Verb Movement in Bantu Languages.".
- Nshemezimana, Ernest and Koen Bostoen. 2016. "14. The conjoint/disjoint alternation in Kirundi (JD62): A case for its abolition.".

Ntahokaja, J.B. 1994. Grammaire structurale du Kirundi. Université du Burundi.

Nurse, Derek. 2009. "Tense and Aspect in Bantu." Afrikanistik Online .

Pollock, Jean-Yves. 1989. "Verb movement, universal grammar and the structure of IP." *Linguistic In- quiry* 20:365–424.

Scott, Tessa. 2021. "Formalizing two types of mixed A/A' movement." manuscript .

Tanda, Vincent A. 2005. "Negation in Mokpe and two related coastal Bantu languages of Cameroon.".

Wal, Jenneke van der. 2015. "Bantu Syntax.".

Zanuttini, Raffaella. 1996. "On the Relevance of Tense for Sentential Negation.".

Zanuttini, Raffaella. 1997. "Negation and verb movement." The New Comparative Syntax pp. 214-245.

Zeller, Jochen. 2021. "'Not' in focus:: objects under negation in Zulu." Studies in African Linguistics .