Chapter 1

A Negative Alternation: Negation Head Movement Allomorphy in Igala

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In Igala (Volta–Niger), pre-verbal negation changes forms depending on the syntactic environment. I argue that they occupy distinct syntactic positions, as in other Niger-Congo languages [e.g., Kirundi (Bantu; Ndayiragije 1999) and Igbo (Volta–Niger; Amaechi 2019)], and propose that this is the result of Neg-to-C movement which is blocked in certain syntactic environments. I show that this explains the distribution of negation in different constructions in Igala as well as embedded clauses in Kirundi.

1 Introduction

In Igala (Volta–Niger), negation is bi-partite where it is expressed as two morphemes: a pre-verbal morpheme and a sentence-final particle, the first of which changes forms depending on the syntactic environment. Pre-verbal negation surfaces as high tone on the subject in finite clauses similar to some dialects of Igbo (Emenanjo 1985; Ndimele 1995; Obiamalu 2013) and the Benue–Congo languages Efik (Mensah 2001) and Ibibio (Essien 1990), where negation can be marked by tone only, as in (1).

(1)   a.   ɛ̂   dʒ(ɛ̄) ɔ̄dā ɔ̀nálɛ́.
             2sg eat   pear yesterday

           'You ate a pear yesterday.'

b. ɛ̃́   dʒ(ɛ̄) ɔ̄dā ɔ̀nálɛ́   ň.
2SG.NEG eat   pear yesterday SFP$_{NEG}$

'You did **not** eat a pear yesterday.'

On the other hand, in clauses involving A'-movement (and inside nominalizations), it surfaces as the pre-verbal particle *má*, shown in (2)[1].

(2) a. * ɛ̃́n(ɛ̃́)$_i$ ɛ̃́   lí t_i ň?
who 2SG.NEG see   SFP$_{NEG}$

b. ɛ̃́n(ɛ̃́)$_i$ ɛ̀   má lí t_i ň?
who 2SG NEG see   SFP$_{NEG}$

'WHO did you **not** see?'

Likewise, similar alternations are found in other Niger-Congo languages; shown by Chaperon (2023) in Kirundi (Bantu JD.62) and Amaechi (2019) in Igbo (Volta–Niger). In Kirundi, negation usually surfaces prior to subject marking on the verb as the prefix *nti-*. In clauses where A'-movement occurs (or within subordinate clauses), negation surfaces as *ta-* following subject marking, as seen in (3).

(3) a. Yohani nti -a-a-funguye.
John   NEG$_1$-1SM-REC.PST-eat.PFV

'Yohani did **not** eat.'

b. ni-ndé$_i$ Yohani a-t(a) -a-bonye   __$_i$?
COP-who John   1SM-NEG$_2$-REC.PST-see.PFV

'WHO did John **not** see?'   (Kirundi; Chaperon 2023)

Similarl, in Igbo negation typically surfaces as the suffix *-ghị* on the verb. However, when A'-movement is involved, a pre-verbal particle *ná* must surface along with this suffix, as in (4).

(4) a. Úchè á-ꜜhú-ghị Òbí.
Uche PFX-see-NEG Obi

'Uche did **not** see Obi.'

b. Ònyé$_i$ kà Úchè ná á-ꜜhú-ghị __$_i$?
who   FOC Uche PRT PFX-see-NEG

'WHO did Uche **not** see?'   (Igbo; Amaechi 2019)

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[1]Foci are formatted using SMALL CAPS

Thus, this alternation between different forms of negation is not an independent phenomenon only found in Igala. Moreover, in both languages just presented, negation occurs in relatively distinct surface positions depending on the syntactic context. I use this as part of the evidence suggesting that negation head moves to a different position in Igala. I argue that negation moves to C° where it surfaces as high tone. In cases where it cannot, it surfaces as the particle *mǎ* instead. Subsequently, I use a contextual allomorphic approach to account for the different surface forms of the pre-verbal negation morphemes. More specifically, I argue that when negation moves to C, it is realized as a high tone (usually on the subject), otherwise it surfaces as the particle *mǎ*.

In §2, I present a full and detailed distribution of negation in different syntactic environments. In §3, I propose that this distribution can be accounted for with head movement of negation to C°. Furthermore, I argue that the different exponents of negation are due to contextual allomorphy. In §4, I show additional evidence for this analysis with modals and embedded clauses and show that it can be extended to Kirundi (Bantu). Finally, in §5 I conclude with a summary along with some avenues for future research.

2 Distribution of Negation

In this section, I show the distribution of pre-verbal negation. The high tone which occurs on the subject will be referred to as 'tonal negation'. When negation surfaces as the particle *mǎ*, it will be referred to as 'particle negation'.

2.1 Tonal Negation

Tonal negation occurs in *declaratives*, *polar interrogatives*, and *imperatives*, which Potsdam (2013) argues are the exact clauses where negation occurs in C in English. It surfaces as a high tone on the last vowel of the subject, which always precedes the verb, as shown in the finite declarative sentences in (5).

(5) a. Tʃìd(ɛ̂) l(í) ádʒúwè lɛ́.
         Chide   see chicken the
         'Chide saw the chicken.'

     b. Tʃìd(ɛ̃̂)   l(í) ádʒúwè lɛ́   ń.
         Chide.NEG see chicken the SFP_NEG
         'Chide did **not** see the chicken.'

Additionally, *tonal negation* can appear in embedded finite clauses. In this case, the negative tone docks onto the embedded subject.

(6) a. ì   kà [kakṹnṹ ⟨î⟩ mà].
    3SG say COMPL 3SG know

    'S/he said that s/he knows.'

  b. ì   kà [kakṹnṹ ⟨î⟩   mà ń].
    3SG say COMPL 3SG.NEG know SFP$_{NEG}$

    'S/he said that s/he does **not** know.'

Igala polar questions are constructed using a question particle, in the form of length, clause finally. When negated, *tonal negation* is used; the interrogative length is added to the sentence-final particle *n*.

(7) a. ɛ̄   dʒ(ɛ̄) ɔ̄d(ā) ɔ̀nálɛ́⟨ː⟩ .
    2SG eat   pear yesterday.Q

    'Did you eat a pear yesterday?'

  b. ɛ̃́   dʒ(ɛ̄) ɔ̄d(ā) ɔ̀nálɛ́   ⟨n̆ː⟩ .
    2SG.NEG eat   pear yesterday SFP$_{NEG}$.Q

    'Did**n't** you eat a pear yesterday?'

Additionally, *tonal negation* is used in imperatives. In Igala imperatives, the subject is usually not overt. However, the subject is required to surface when negating them. I assume that it is because *tonal negation* needs to anchor somewhere, so the subject is realized overtly.

(8) a. ⟨(ɛ̄)⟩ dʒɛ́!   b. ⟨*(ɛ̃́)⟩ dʒɛ́ ń!
    2SG eat   2SG.NEG eat SFP$_{NEG}$

    'Eat!'   'Do**n't** eat!'

I have shown that *tonal negation* surfaces in *declaratives*, *polar interrogatives*, and *imperatives*. These clauses will be important in arguing for a shared position in the left periphery for negation and C.

2.2 Particle Negation

Next, the particle form of pre-verbal negation is used in clauses involving extraction and inside nominalizations. In these cases, it surfaces as the particle *mǎ* before the verb.

2.2.1 A'-movement

Particle negation is used when A'-extraction occurs: in wh-questions, with focus fronting, and inside relative clauses. This is shown with subject focus in (9), the non-subject focus in (10), and adjunct focus in (11).

(9) a. ɛ́nɛ̃́ᵢ __ᵢ ɲà lɔ́ t(i) édʒúgbɔ̄lɔ̄gʷù í?
        who   FUT go to park   FOC
        'WHO will go to the park?'

     b. ɛ́nɛ̃́ᵢ __ᵢ (mǎ) lɔ́ t(i) édʒúgbɔ̄lɔ̄gʷù ń   ì?
        who   NEG go to park   SFP$_{NEG}$ FOC
        'WHO will **not** go to the park?'

(10) a. ɔ̄ŋʷúᵢ ɛ̃́   fɛ́dɔ̄ __ᵢ í.
        3SG.STR 2SG love   FOC
        'It's HIM you love.'

     b. ɔ̄ŋʷúᵢ ɛ̃́   (mǎ) fɛ́dɔ̄ __ᵢ ń   í.
        3SG.STR 2SG NEG love   SFP$_{NEG}$ FOC
        'It's HIM you do **not** love.'

(11) ōnálɛ̀   ī má   (mǎ) t(ɛ) ám(a) ēnè   ń.
    yesterday 3SG should NEG ask PL   question SFP$_{NEG}$
    'It's YESTERDAY s/he should **not** have asked questions.'

When long distance extraction occurs, *mǎ* only appears in the clauses which have been negated. In (12a), only the embedded clause is negated, in (12b) only the matrix clause is, and in (12c) both clauses are negated.

(12) a. ídʒɛ̃́nìᵢ ɔ̄ŋʷū ɔ̀jà pítà mà   [kàkíní pítà (mǎ) k(a) ɔ̀là
        Jane   3SG.STR wife Peter know COMPL Peter NEG speak word
        kp(ai) óŋʷūᵢ ń]   ì.
        with   3SG.STR SFP$_{NEG}$ FOC
        'It's JANEᵢ that Peter's wife knows that Peter did **not** speak to (herᵢ).'

     b. ídʒɛ̃́nìᵢ ɔ̄ŋʷū ɔ̀já pítà (mǎ) mà   [kàkín(í) ípítà k(a) ɔ̀là
        Jane   3SG.STR wife Peter NEG know COMPL   Peter say word
        kp(ai) óŋʷūᵢ] í   ń̌.
        with   3SG.STR FOC SFP$_{NEG}$
        'It's JANEᵢ that Peter's wife does **not** know that Peter spoke to (herᵢ).'

c. ídʒɛ́nì_i ɔ̄ŋʷū   ɔ̀já pítà 〔mɑ̌〕 mà   [kàkín(í) ɪ́pítà 〔mɑ̌〕 k(a) ɔ̀là
    Jane 3SG.STR wife Peter NEG know COMPL Peter NEG say word
    kp(ai) óŋʷū_i] í   ń̀.
    with 3SG.STR FOC SFP_{NEG}

    'It's JANE_i that Peter's wife does **not** know that Peter did **not** speak to
    (her_i).'

In long distance extraction, not only does negation occur in the clause
containing the extracted element's initial trace, but also in all clauses along the
path of A'-movement. Thus, negation in Igala exhibits cyclic effects (Chomsky
1977; 1986; 1993).

2.2.2 Nominalizations

Finally, *particle negation* is used inside nominalizations, as in (13). Both the pre-
verbal and sentence-final particle surface inside.

(13) a. [ɛ̌   tʃ(e) ìskúlù kpā] tʃ(e) ɛ̀ŋʷ(u) òmɛ̀mɛ̀lɛ̀.
         NMLZ do   school finish COP thing nice

         'Finishing school is a good thing.'

      b. [ɛ̌   〔mɑ̌〕 tʃ(e) ìskúlù kpā 〔ń〕]   tʃ(e) ɛ̀ŋʷ(u) òmɛ̀mɛ̀lɛ̀.
         NMLZ NEG do   school finish SFP_{NEG} COP thing nice

         '**Not** finishing school is a good thing.'

By hypothesis, nominalizations do not contain the C domain; I propose
that they can only take clauses up to *v*P or AspP (or NegP when negated). Two
observations illustrate this point: (i) They can contain inflectional elements like
aspect, as in (14).[2]

(14) a. **[ɛ̌   〔f(i)〕 ìskúlù tʃē kpā]** tʃ(e) ɛ̄ŋʷū ògbɔ̄gágá ì   tʃē.
         NMLZ PFV school COP finish COP thing important 3SG COP

         'Having finished school is an important thing.'

      b. **[ɛ̌   〔nâ〕 tʃ(e) ìskúlù kpā]** tʃ(e) ɛ̄ŋʷū ògbɔ̄gágá ì   tʃē.
         NMLZ PROG COP school finish COP thing important 3SG COP

         'Finishing school is an important thing.'

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[2]Note that these are subject nominalizations (i.e., located in the subject position).

Additionally, (ii) nominalizations cannot contain an overt subject, unless it is external. In the examples below, the two strategies used to circumvent this are shown; speakers can either use an external subject, as in (15a), or a possessor outside of the nominalized clause, as in (15b).

(15)   a.   ⟨òŋ^w(u)⟩ **[é**   l(a) ímōtò**]** ì   tʃ(e) ìbè   ɔ̄mɛ̀lɛ̀lɛ̄ ɪ̌   tʃě
                3SG.STR   NMLZ buy car   3SG COP thought good   3SG.NEG COP
                ń.
                SFP_{NEG}
                'Him buying a car was a bad idea.'

     b.   ímòtò **[é**   lá**]** ⟨ŋ^wū⟩   ì   tʃ(e) ìbè   ɔ̄mɛ̀lɛ̀lɛ̄ ɪ̌   tʃě
                car   NMLZ buy 3SG.POSS 3SG COP thought good   3SG.NEG COP
                ń.
                SFP_{NEG}
                'His buying of a car was a bad idea.'

I assume that nominalizations still contain a *PRO* subject in spec,*v*P (Abney 1987; Kratzer 1996: among others). I also assume that nominalizations do not contain the C domain. Overall, *mǎ* surfaces both in negative clauses where extraction has occurred and inside nominalizations.

We examine this distribution more closely in the next section, where I propose an analysis to account for it. I argue that negation moves to C, but in clauses involving A'-movement its movement is blocked and within nominalization there is no C position for it to move to.

3   Neg-to-C movement

In this section, I offer an analysis of the two different instantiations of negation in Igala. I first assume that all finite clauses contain a CP (Chomsky 2007). I argue that negation heads its own functional projection in the inflectional domain and that it moves to C°. I claim that (i) when movement to C is blocked, negation surfaces as the pre-verbal particle *mǎ*, (ii) when it does move to C, pre-verbal negation surfaces as a super high tone on the subject, and (iii) the different phonological forms of negation are the result of contextual allomorphy.

Particle negation surfaces *in-situ* in clauses involving A'-movement and inside nominalizations. I stipulate that these environments share a common property – the C-domain is not available for head movement. When A'-movement

occurs, the [+wh] C° blocks movement to it, which blocks Neg-to-C movement[3]. I have also shown that nominalizations are not clausal (see §2.2.2), so negation has no C to move to. Both of these environments are unified in that the left periphery inaccessible.

On the other hand, *tonal negation* occurs in *declaratives*, *imperatives*, and *interrogatives*. Potsdam (2013) argues that in English these exact clauses are examples in which negation occurs in C°. Similarly, Déchaine & Wiltschko (2002) argue that negation can be found in or close to C. In fact, they had previously argued that "the base position for NEG in Algonquian is pre-verbal (…) and that NEG may raise to higher positions outside of IP" (Déchaine & Wiltschko 2001). I take this as evidence that negation moves to C° (through I°) in these syntactic environments. This could account for the different overt positions of negation shown earlier in Kirundi (Bantu; Chaperon 2023) and Igbo (Volta–Niger; Amaechi 2019).

Finally, I posit that the alternate form of pre-verbal negation is due to contextual allomorphy (Embick 2010; Marantz 2013). Pre-verbal negation surfaces as a high tone when it is located in C, otherwise it surfaces as *mǎ*. A more formal definition is shown in (16) below.

(16)   Vocabulary entries for pre-verbal negation:

$$\left[\text{ NEG } \right] \rightarrow \left[\begin{array}{c} '' \\ \text{mǎ} \end{array} \right] / \left\{ \begin{array}{c} [_\text{C} \, \_] \\ \end{array} \right\}$$

Henceforth, the remainder of this section illustrates that this analysis can account for all cases of negation shown throughout.

3.1 Blocked Neg-to-C and particle negation

In this section, I show two cases where pre-verbal negation does not move to C° and does not surface as high tone on the subject, but instead as the particle *mǎ* – inside nominalizations and in clauses involving A'-movement.

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[3]It has been argued that A'-movement and some types of negation are incompatible (Roberts 2018).

3.1.1 Nominalizations

Here, I show an example derivation of a negated nominalized clause. A derivation for example (17) is shown in Figure (1)[4].

(17) [é   m̌á tʃ(e) ìskúlù kpā   ń]   tʃ(e) ɛ̀ŋʷ(u) bjɛ́nɛ̄.
      NMLZ NEG do   school finish SFP_NEG COP thing bad
   '**Not** finishing school is a bad thing.'[5]

     The nominalized clause is headed by the nominalizer *ě* which takes clauses bigger than *v*P (e.g., negation). Given this, I assume that nominalizations involve a *PRO* (Abney 1987; Kratzer 1996: among others). The *PRO* subject is generated in spec,*v*P which I assume does not move given that no head within the nominalized clauses has an [EPP] feature. Pre-verbal negation does not move up to C° within nominalized clauses as they do not contain a CP; it instead surfaces as the particle *m̌á*.
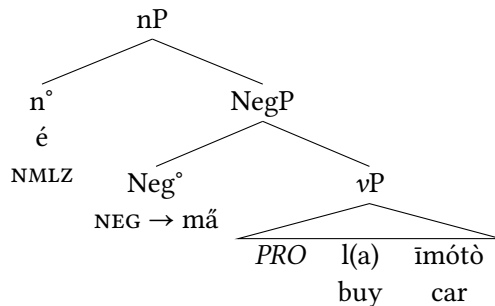

Figure 1: Negation inside a nominalized clause

3.1.2 A'-movement

Next, I show a derivation for a clause involving A'-movement. The derivation for example (18) below is shown in Figure (2).

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[4]I follow Tremblay (to appear) in assuming that Igala has an underlying SOV word order where the verb moves up to *v*, resulting in an SVO surface order (Koopman 1984).

[5]I omit sentence-final particles in trees for simplicity.

(18) ɛ̋ŋʷű̆ᵢ ɛ̀ ⌈mǎ⌉ ɲèdʒū __ᵢ ń   ì?
      what 2SG NEG like   SFP_NEG FOC

   'WHAT do you **not** like?'

The subject is generated in spec,*v*P moves to spec,IP to check the [EPP] feature on I°. The focused constituent (here the object) moves to the specifier of the [+wh] C head. In this case, since the [+wh] C head blocks movement of negation, pre-verbal negation can only move up to I°, where it surfaces as the *mǎ* particle.
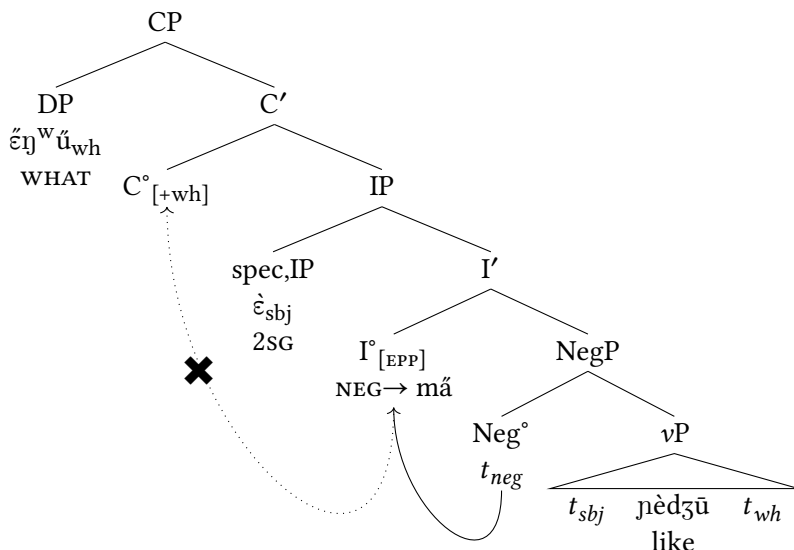

Figure 2: Negation in a clause involving A'-movement

3.2 Neg-to-C and tonal negation

In this section, I show the derivation for contexts in which negation moves to C° and surfaces as *tonal negation*. More specifically, I show a case of a *declarative* clause, as *imperatives* and *polar questions* would be derived similarly. In these cases, pre-verbal negation surfaces as a high tone (on the subject).

I argue that both I and C have an [EPP] feature that must be checked by the subject (Chomsky 2000). Aboh (2006) argues that this is also the case in Gungbe

(Volta-Niger). Hence, subjects must first move to spec,IP and subsequently move to the specifier position of C. The derivation for (19) is shown in (3).

(19) ɛ̰́ ɲ(i) áɲí ń.
    2SG.NEG laugh(v) laugh(N) SFP_{NEG}

    'You did **not** laugh.'

Both the I and the C heads have an [EPP] feature which the subject generated in spec,*v*P must check. It first moves up to spec,IP and then to spec,CP. Finally, negation moves up to C° through I° and surfaces as high tone (on the last vowel of the subject) since it is in the left periphery, as per its vocabulary entry rule in (16).
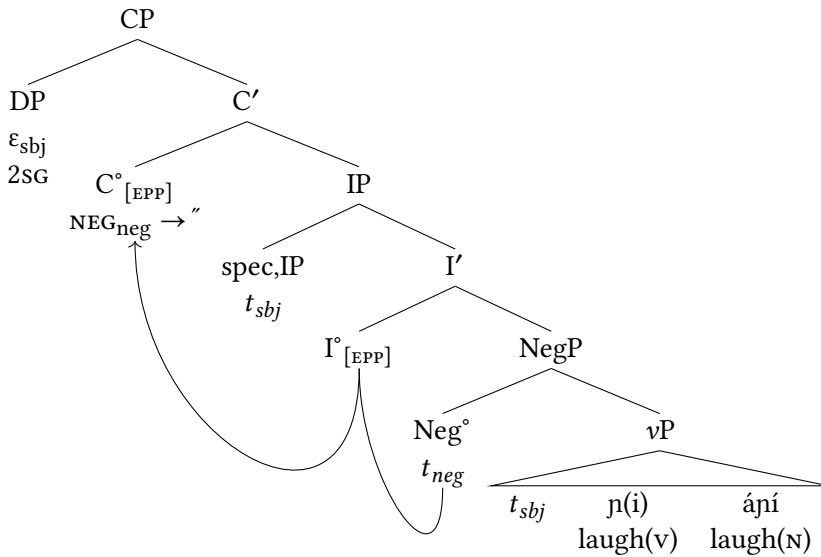

Figure 3: Negation in a finite matrix clause: declarative

I assume that the same applies to polar questions and imperatives. In these clauses, negation also surfaces as tone on the subject; examples (7b) and (8b) are repeated in (20) and (21) respectively.

(20) ɛ̰́ dʒ(ē) ɔ̄d(ā) ɔ̀nálɛ́ ň:.
    2SG.NEG eat pear yesterday NEG.SFP.Q

    'Did**n't** you eat a pear yesterday?'

(21)   [*(έ̌)]   dʒέ ń!
       2SG.NEG eat NEG.SFP

    'Do**n't** eat!'

I assume that, as in declarative clauses, the C° heads in these clauses also do not block the movement of Neg to C°.

Given that subjects surface in the specifier to the left of C°, pre-verbal negation occurs immediately to its right. This accounts for why *tonal negation* anchors to the last syllable of subjects. More generally, *tonal negation* adjoins to the rightmost vowel of its specifier. This is stated more formally in (22) below, leave the precise mechanism at hand to PF.

(22)   *Linearization of tonal negation*
    $[_{CP}[_{spec,CP} (...CV.C)V][_{C'}[_{C°} ''][...]]] \Longrightarrow$ (...CV.C)V̌

In this section, I have shown that a head-movement analysis can account for the surface position and exponent of negation in different syntactic environments. I have shown that when movement to C is blocked – in clauses involving A'-movement and inside nomnalizations – negation surfaces as the pre-verbal particle *mǎ* and when it does move to C – in finite clauses – pre-verbal negation surfaces as a super high tone on the subject.

4 Additional evidence

In this section, I extend this analysis by showing that it can account for negation in other contexts – when it occurs with modals and when it occurs inside embedded clauses.

4.1 Modals

In this section, I demonstrate that the occurrence of negation in clauses with a deontic modal can support my analysis. I have shown that when negation surfaces in C°, it is realized as a high tone on the last vowel of its specifier. If there was another head found in C° that does not block the movement of negation, we might expect *tonal negation* to be able to surface on it. I propose that the modal-like element, *ki* 'should', is exactly such a head.

First, if another functional element occurs after the subject in a negated clause, *tonal negation* cannot surface on it. For example, *tonal negation* cannot

surface on the progressive morpheme, it surfaces on the subject instead, as in (23).

(23) a. * í   [nǎ]   l(a) īmótô ń.
            3SG PROG.NEG buy car   SFP_NEG

      b. [î]   nâ   l(a) īmótô ń.
            3SG.NEG PROG buy   car   SFP_NEG
            'S/he was not buying a car.'

This shows that *tonal negation* does not simply surface on the nearest head. On the other hand, the tone for negation surfaces on the modal *ki*, which always surfaces after the subject[6]. Example (24) shows that, as with the subject, *tonal negation* anchors to it.

(24) a. ī   [kī]   t(ɛ̄) ēnè.
            3SG should ask question
            'S/he should ask a question.'

      b. ī   [kǐ]   t(ɛ̄) ēnè   ń.
            3SG should.NEG ask question SFP_NEG
            'S/he should **not** ask a question.'

The parallel behavior of 'ki' and *tonal negation* suggests that they share the same position. I claim that 'ki' is not in the inflectional domain, but is generated in C instead. A similar claim has been made by Aboh (2006), who follows Damonte (2002) and Aboh 2004 in arguing that Saramaccan (Niger–Congo derived English–Portuguese Creole) and Gungbe (Volta-Niger) deontic *fu* and *ní* respectively are modal complementizers that surface in Fin°. If 'ki' is generated in C, this predicts that it would be incompatible with A'-movement. (25) shows that elements in the inflectional domain are compatible with A'-movement, but this modal is not.

(25) a. ɛ̋nɛ̋ᵢ __ᵢ [nâ] kɔ̄ ì?
            who   PROG bark FOC
            'Who is barking?'

      b. * ɛ̋fū   (i)klâʃ(i)ᵢ òŋʷū   ì   [kī]   ì   t(ɛ̄) ám(a) ēnè   __ᵢ.
            inside class   3SG.STR 3SG should 3SG to PL   question
            Intended: It's IN CLASS s/he should ask questions.

[6]Whether the tone can optionally appear on the subject instead must be checked.

To get the intended meaning, the verb *dukpe* 'suppose to' must be used instead, as in (26).

(26) ɛ́fū (i)klâʃ(i)ᵢ òŋʷū ì ⌜dúkpē⌝ k(i)-ì t(ɛ̄) ám(a) ēnè ___ᵢ.
      inside class 3SG.STR 3SG supposed SBJV-3SG to PL question
      'It's IN CLASS s/he should ask questions.'

In Figure (4), I show that this claim derives the correct attachment site of *tonal negation*, using (24b) above. The modal '*ki*' is generated in C°, where negation moves to it head through the head of IP. Unlike in the previous derivation, instead of surfacing as high tone on the last vowel of the subject it instead surfaces on the modal.
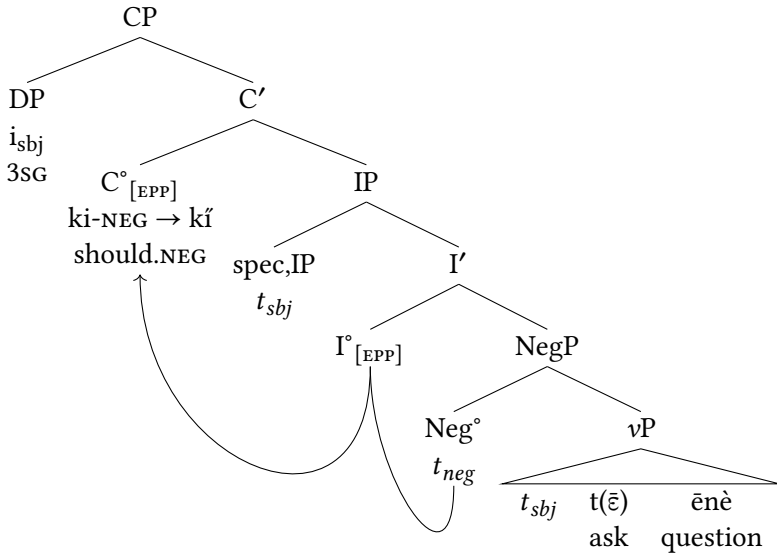

Figure 4: Negation with the modal 'ki'

Consequently, I assume that *tonal negation* anchors to the C head but in other cases must affix to its specifier. This generalization is stated more formally in (27) as an updated version of (22).

(27) *Linearization of tonal negation (updated)*
      a. $[_{CP}[_{spec,CP} (...CV.C)V][_{C'} [_{C°} (...CV.C)V + ''][...]]] \implies (...CV.C)V (...CV.C)\v{V}$
      b. $[_{CP}[_{spec,CP} (...CV.C)V][_{C'} [_{C°} \~{o}][...]]] \implies (...CV.C)\v{V}$

In other words, *tonal negation* adjoins to the linearly rightmost vowel on its left. If a head is present, negation will surface on its last syllable whilst if there is no head, this will apply to the specifier instead.

I have argued that *ki* is generated in C in Igala, which is motivated by two facts. First, negation moves up to C° and surfaces on this modal (but not on any other functional elements). Secondly, this modal is incompatible with A'-movement; like *tonal negation*.

4.2 Embedding complementizers

There are two types of languages: (i) those where the complementizer embeds the whole left periphery, and projects higher than topic and focus (*e.g.* Wolof and Italian; Dunigan 1994; Rizzi 1997), and (ii) those where the complementizer only embeds IP, and shares the A' slot (*e.g.* German and Old English; Gelderen 2004). This variation in left peripheral structure should affect the type of negation in embedded clauses; languages with high embedding complementizer should allow Neg-to-C movement and those with a low embedding complementizer should block this movement. In this section, I show that this is the exact contrast found between Igala and Kirundi (Bantu).

4.3 Igala

In this subsection, I show that Igala has a high embedding complementizer which allows Neg-to-C movement. In this language, constituents can be focus within embedded clauses, as in (28).

(28)   a. ɔ̃jǎ-à Pítà tʃé má   [kàkíní Pítà k(à)   ɔ̀là   kp(àí) Ánà].
          wife Peter do know COMPL Peter speak word with   Anna

          'Peter's wife knows that Peter spoke to Anna.'

       b. ɔ̃jǎ-à_j Pítà tʃé má   [kàkíní (Ánà_i) Pítà k(à)   ɔ̀là   kp(àí)
          wife   Peter do know COMPL Anna   Peter speak word with

          òŋʷū_i   (í)].
          3SG.STR FOC

          'Peter's wife knows that it's ANNA that Peter spoke to.'

This example shows that the complementizer in Igala can embed foci. Following a "split-CP" *á la* Rizzi (1997), I posit that *kakini* is a higher embedding complementizer in Force. It follows that Neg-to-C movement should be possible

in embedded clauses, so negation should surface in the same form in embedded clauses as in matrix clauses – with *tonal negation*[7]. This can be seen in (29) below.

(29) ì   kà [kàkíní $\widehat{\text{í}}$ mà   ń].
3SG say COMPL 3SG.NEG know SFP$_{\text{NEG}}$
'S/he said s/he did **not** know.'

     I argue that the high embedding complementizer in Igala allows Neg-to-C movement, as it surfaces as high tone on the embedded subject.

4.4 Kirundi

In this subsection, I show that Kirundi (Bantu JD.62) has a low embedding complementizer which blocks Neg-to-C movement. This language uses the complementizer *ko* to embedded clauses as in (30), and focus constructions are made by extracting foci to the left periphery, where they follow the particle *ni* as in (31). Various claims have been made about *ni*; Gatchalian (2023) argues that it is a copula found in the left periphery.

(30) Keezá a-rá-zi   [[ko] Juma a-somye   igitabo].
Keezá 1SM-DJ-know COMPL Juma 1SM-read.PFV 7book
'Keeza knows that Juma read a book.'

(31) a. Yohani a-á-guze   igitabo.
John   1SM-PST-buy.PFV 7book
'John bought a book.'

    b. [ni igitabo] yohani a-á-guze.
COP 7book John   1SM-PST-buy.PFV
'It's A BOOK John bought.'

     In contrast to Igala, foci, or the whole left periphery more generally, cannot be embedded in Kirundi, as shown in (32).

(32) * Keezá a-rá-zi   [[ko   ni   igitabo] Juma a-somye].
Keezá 1SM-DJ-know COMPL   COP 7book Juma 1SM-read.PFV
Intended: 'Keeza knows that it's A BOOK Juma read.'

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[7]Tonal negation appears on the subject and not the complementizer due to movement not being possible to a higher head.

I argue that the complementizer 'ko' is located lower in C° and not in Force° as in Igala. As predicted, the lower non-matrix form (equiv. *particle negation*) must be used instead. In finite matrix clauses, negation surfaces as the prefix 'nti-' on the verb, as in (33); in embedded clauses, it cannot be used, the prefix *ta-* following subject marking surfaces instead, as in (34).

(33) Yohani nti -a-a-funguye.
      John   NEG₁-1SM-REC.PST-eat.PFV
      'Yohani did **not** eat.'

(34) a. * Keezá a-rá-zi   [ko   Juma nti -a-somye   igitabo].
             Keezá 1SM-DJ-know COMPL Juma NEG₁-1SM-read.PFV 7book

      b. Keezá a-rá-zi   [ko   Juma a- ta -somye   igitabo].
          Keezá 1SM-DJ-know COMPL Juma 1SM-NEG₂-read.PFV 7book
          'Keeza knows that Juma did **not** read a book.'   (Chaperon 2023)

I argue that the low embedding complementizer in Kirundi blocks Neg-to-C movement. This is similar to V-to-C movement being blocked in Germanic subordinate clauses due to the complementizer filling the C° position (Kiparsky 1995).

I have shown that this analysis accounts for the height of complementizers. I have argued that in Igala, the high embedding complementizer in Force° allows negation to move to C°. On the other hand, in Kirundi the low embedding complementizer in C° blocks negation from moving to it. This accounts for both the surface positions and exponents of negation in embedded clauses in both languages.

5 Conclusion

To conclude, Igala has a bi-partite negation system: a pre-verbal form and a sentence-final particle. Pre-verbal negation can surface either as a high tone on the subject or as the particle *mǎ*. In this paper, I have argued that these different exponents of pre-verbal negation are due to head movement (or its restriction) to C°. I account for its different exponents using contextual allomorphy. I propose that negation surfaces as high tone when it moves to C° but surfaces as the particle *mǎ* when this movement is blocked. I show that this restriction occurs in two types of clauses. First, in A'-movement clauses due to the [+wh] head blocking movement to it. Additionally, in nominalizations, negation has nowhere to

move to as C is not contained within them. Subsequently, I have shown that this analysis accounts for all cases where negation occurs, including with the modal *ki* 'should'. Furthermore, it accounts for what exponents (and position) negation is realized as in both Kirundi (Bantu) and Igala embedded clauses, which I argue have low and high complementizers respectively.

A shortcoming of this this proposal is that it is not derived; a blocking property has to be stipulated or not for each separate C. For example, I have argued that in Igala the [+wh] C° blocks the movement of negation to it. On the other hand, those in declaratives, imperatives, polar questions, and even those filled with overt material, like the modal 'ki', do not block the movement of negation. Hence, a blocking property has to be stipulated for all of these other C heads separately.

The next step in this research is to see how this could be captured in a more principled way. Given that this is a common phenomenon in Niger-Congo languages, investigating more languages would help in proposing a more attractive and consolidated analysis. Cross-linguistic variation is expected which would aid in distinguishing between all of the mechanisms occurring during the whole derivation. Another question that remains to be answered is the relationship between the pre-verbal and sentence-final forms of negation.

Abbreviations

COMPL	complementizer	COP	copula
DJ	disjoint marker	FOC	focus
FUT	future	NEG	negation
NEG$_1$	primary negation	NEG$_2$	secondary negation
NMLZ	nominalizer	PST	past
PFV	perfective	PFX	prefix
PL	plural	PROG	progressive
PRT	particle	Q	question
REC	recent	REM	remote
SFP	sentence-final particle	SG	singular
SM	subject marker	STR	strong

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