

YES-NO QUESTION FORMATION IN IGBO: THE PHONO-SYNTAX INTERFACE¹

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Abstract

The low tone on Igbo pronouns has been argued to be used to initiate yes-no questions. This paper describes the derivation of this low tone. The paper argues that the low tone on singular subject pronoun in Igbo yes-no questions is a relic of the question particle *a'* found in the plural counterpart. With yes-no questions involving singular subject DP, the question particle *a'* is not found, but the low tone on the question particle re-links to the preceding subject pronoun in the singular. This interrogative tone that is retained forces the high tone on the preceding subject pronoun to be deleted and takes over by being the tone on the pronoun on the singular subject DP. It is discovered that the Igbo interrogative head attracts clitic pronouns. Following Rizzi (1997; 2001) and Aboh (2004; 2010) analyses of the C-system, it is argued that the question particle *a'* is being hosted by the interrogative force that is associated with the Int^o which is the head of the IntP.

Résumé

On considère en général que le ton bas sur les pronoms en igbo est utilisé pour initier les questions directes. Cet article décrit la dérivation de ce ton bas. L'argument avancé dans l'article est que le ton bas sur le pronom sujet au singulier dans les questions directes en igbo est une relique de la particule de question *à* qu'on trouve dans la forme plurielle. La particule de question *à* n'apparaît pas dans les questions directes impliquant le syntagme déterminatif sujet, mais le ton bas de la particule de question se retrouve sur la voyelle du pronom sujet au singulier. Ce ton interrogatif qui est ainsi retenu force le ton haut sur la voyelle du pronom sujet qui précède de s'effacer et il est celui qui se réalise sur le pronom de la voyelle du pronom sujet du syntagme déterminatif. L'on découvre que la tête de l'interrogatif en igbo attire les pronoms clitiques. À la suite des analyses du C-system (Système de Complémentiseur) de Rizzi (1997; 2001) et de Aboh (2004; 2010), nous avançons l'argument selon lequel la particule de question *à* est sous la coupole de la force interrogative qui est associée à l'Int^o qui est la tête de l'IntP.

1. Introduction

Tone plays an important role in any tone language. Tones in tone languages play not just lexical function in distinguishing morphemes, but are also important in performing certain functions in the grammar of such languages. In the grammar of Igbo, tone distinguishes declarative sentences from their interrogative counterparts (Uwalaka 1997).

In this paper, we will examine the role played by tone in yes-no question in Igbo, and also establish the source of this grammatical function of tone. In the first part of this paper, we shall consider both the lexical and syntactic tones in the language. The second part considers the derivation of the low tone on singular subject pronouns in yes-no questions. This tone is a remnant of the question particle found with yes-no questions involving plural pronouns. In yes-no questions involving singular subject pronouns, the phoneme bearing the tone is deleted but the tone segment is not deleted and it re-links to the preceding vowel segment in this case, it is usually a subject pronoun in the language. We shall be using the split-C hypothesis of Rizzi (1997), and also incorporating the interrogative phrase hypothesis (Rizzi 2001; Aboh 2004) to account for the question particle.

Igbo is the third largest indigenous language in Nigeria. It is spoken indigenously in the South-Eastern states of Abia, Anambra, Ebonyi, Enugu and Imo

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(Anyanwu 2012). The language belongs to the Kwa language family going by Greenberg's (1963) classification. However, it was reclassified alongside some other Kwa languages, grouped together and named West Benue-Congo by Blench (1989), and together with the East Benue-Congo make up the Proto-Benue-Congo.

In the literature, Uwalaka (1991:4) examines *wh*-movements in Igbo and she points out that Igbo has an interrogative structure characterized by initial low tone. Uwalaka added that the initial low tone on most *wh*-phrases patterns the low tone on Igbo pronouns which are used to initiate yes-no questions. Mbah (2012) notes that questions in Igbo usually involve movement. He explains that in yes-no questions in Igbo, movement is involved. His argument is that in yes-no questions, the subject of the sentence is moved to the Spec-CP position, thus yielding a resumptive pronoun in its original position. According to Anyanwu (2012), pronominal elements in Igbo have been categorized into two types: the independent ones and the dependent, short, weak ones. Whereas the independent pronominal elements can occur both at the subject and object positions, the so-called dependent ones (which have also been analyzed as resumptive pronouns (Uwalaka, 1995)) are restricted to the subject position. In his paper, Anyanwu examines the dependent pronominal elements in Igbo and reanalyzed them as pronominal subject clitics (PSCs).

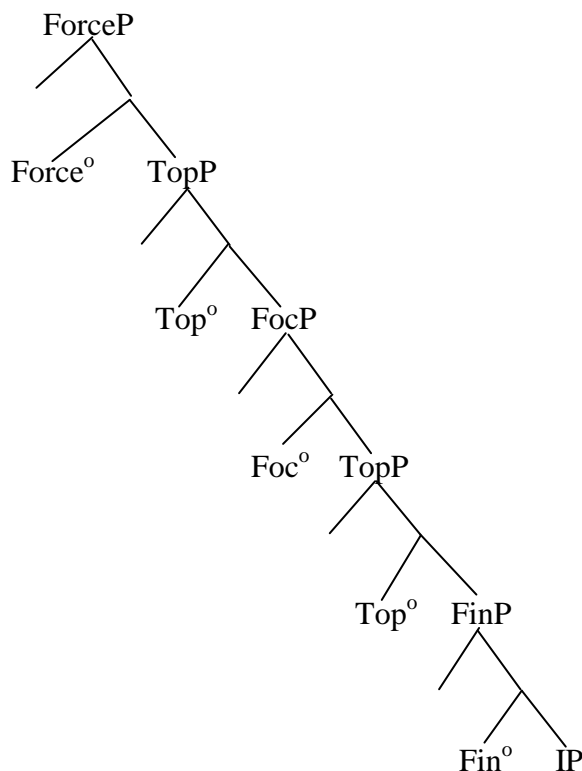
2. The int(errogative) phrase within the C-system

In line with the Split-IP analysis of Pollock (1989), Rizzi (1997, 2001, 2004) suggests that the CP or C-system be split into a number of different projections. He suggests that complementisers (by virtue of their role in specifying whether a given clause is declarative, interrogative, imperative or exclamative in force) should be analysed as force markers heading a Force Phrase (ForceP) projection, and that focused constituent should be analysed as contained within a separate focus phrase (FocP) headed by a focus constituent (=Focus marker) (Radford 2004: 227). From a discourse perspective, a focused constituent typically represents new information. In this respect, focused constituents differ from another class of preposed expressions which serve as the topic of the clause immediately containing them. Topics are said to present old information. Just like focus heads the FocP, Topic phrase (TopP) is headed by Topic. There is a fourth projection Finiteness Phrase (FinP) which is positioned below FocP and above TP. The head Fin constituent serves the function of marking a clause as finite or non-finite.

The C-system involves a more articulated structure where each of the features traditionally associated with the CP layer is the syntactic head of a maximal projection. Rizzi (1997) assumes four elements typically occurring in the left periphery of a clause: the specifications of force (Chomsky, 1995), topic, focus and finiteness. They are the heads of the functional projections of ForceP, TopP, FocP and FinP respectively which project within the C-system (Aboh 2004).

Force constitutes an interface between a propositional content (expressed by the IP) and the superordinate structure (the main clause, or the discourse). It may be morphologically realized in a language. A case in point here is the question marker *à* found after plural subjects in Igbo yes-no questions and only the tone being maintained in the case of the singular. Granting that topic and focus also involve left periphery scope-discourse properties, Rizzi (1997) proposes that the C-system includes functional projections TopP and FocP whose heads encode the topic and focus features respectively, and whose specifiers host their respective elements. FinP, on the other hand, projects as the lowest functional projection of the C-system. It is relevant with respect to the embedded IP as it "contains a tense specification which matches the one expressed on the lower inflectional system" (Rizzi 1997:283). The force-finiteness system terminates the C-system upward and downward. While force distinguishes various clause types, finiteness distinguishes between finite and non-finite clauses. Topic and focus are only inserted when a constituent bears the features. This is represented below in (1):

(1) ... Force ... (Topic) ... (Focus) ... (Topic) ... Fin ... IP
 Rizzi (1997) proposed the following structure for the C-system.



Form the above structure, it could be noticed that there are two TopPs. Data from Italian (Rizzi 1997; 2001) show that multiple topics may precede or follow focused elements. This led to having TopP as indicated above.

In accounting for embedded yes-no questions in Italian, Rizzi (2001) proposes that there is need for a distinct position, Int(errogative) position within the C-system for the embedded *se* 'if' in Italian distinct from force, since there is already another C element which occupies the force head position in such sentences that have embedded yes-no question. The Interrogative Phrase (IntP) was introduced and its position is below the ForceP.

3. Tone in Igbo

A tone language according to Hyman (2006:229) is a language in which an indication of pitch enters into the lexical realization of at least some morphemes. The majority of African languages are tone languages (Clements 2000). In Igbo, in addition to the two distinctive tones, high (H) and low (L), there is also a downstep tone (Igwe 1999). Aboh (2010) describes the downstep as one of the complicated tonal situations which occurs in Kwa languages with only two basic-level tones. The following examples² in (2) show how lexical items are distinguished with the use of tone³.

² Unless otherwise stated, the data for this study were collected from a native speaker of Igbo and also the author's intuition as a native speaker of the language. The data presented are from the standard variety of the language (Ikekeonwu 1999). This variety is not based on a particular dialect but rather based on the Owerri, Ụmụahịa and Qnịtsha dialects (Emenanjo 1978).

³ This is the tone marking convention adopted: the high tone is indicated with an acute accent (´), the low tone with a grave accent (`) and the downstep is indicated with macron (¯). The diacritics are superscripts.

- (2)
- | | | |
|----|------------|------------|
| a. | òké | ‘rat’ |
| b. | óké | ‘male’ |
| c. | òkè | ‘share’ |
| d. | ókè | ‘boundary’ |

The examples in (2) involved only the two basic-level tones: high and low. The downstep tone which is part of the basic structure of infinitives, negatives, perfectives and genitives (Eze & Manfredi 2001) also occurs in a few underived nouns. Example (3) below shows lexical items involving the downstep tone.

- (3)
- | | | |
|----|--------------|----------|
| a. | nwókē | ‘man’ |
| b. | bíkō | ‘please’ |
| c. | ígwē | ‘king’ |
| d. | ágū | ‘tiger’ |

Tone also performs syntactic and discourse function in the grammar of Igbo. For instance, tone is used to convey the idea of possession in the language. Tone is also used in associative constructions (Welmers 1973; Nwachukwu 19995). Obiamalu (2013a) refers to both the possessive and associative constructions as genitive and he discusses the tone patterns in these kinds of constructions.

One of the areas of clause structure where tone plays an important role in Igbo is in forming yes-no question. This is also the case in Gungbe, one of the Gbe languages where tone is employed in forming yes-no question (cf. Aboh 2004; 2010). In section 3, we shall look at the yes-no question in Igbo.

4. Yes-no question in Igbo

In forming yes-no question in Igbo, the language’s basic word order of SVO does not change. The basic difference between a declarative sentence and an interrogative (yes-no) sentence is that of tone (see example (4) below). Tone performs the grammatical function of forming yes-no questions (Uwalaka 1997).

For singular subject pronouns which usually have high tones in declarative sentences, the high tone is changed to low tone in questions. Consider the following sentences in (4).

- (4)
- | | | | | |
|-------|------------------------------|---------------|--------------|------------|
| a. i) | Ó⁴ | chò-rò | írì | jí. |
| | 3SG | want-PST | eat | yam |
| | ‘S/he wants to eat yam.’ | | | |
| ii) | Ò | chò-rò | írì | jí? |
| | 3SG.QM | want-PST | eat | yam |
| | ‘Does s/he want to eat yam?’ | | | |
| b. i) | Í | gà-àgá | áhíá. | |
| | 2SG | FUT-go | market | |
| | ‘You will go to the market.’ | | | |
| ii) | Ì | gà-àgá | áhíá? | |
| | 2SG.QM | FUT-go | market | |
| | ‘Will you go to the market?’ | | | |

⁴ In the orthography of Igbo, the sub-dot is used to distinguish vowels based on their +/-ATR harmony.

- c. i) **Á** **nò** **m̃** **n'úlò.**
 1SG stay 1SG P house
 'I am at home.'
- ii) **À** **nò** **m̃** **n'úlò?**
 1SG.QM stay 1SG P house
 'Am I at home?'
- d. i) **Á** **kpò-rò** **gì** **òkù.**
 INDEF call-PST 2SG call
 'You were called.'
- ii) **À** **kpò-rò** **gì** **òkù?**
 INDEF.QM call-PST 2SG call
 'Were you called?'

Tone is used exclusively for forming interrogative for the 1st, 2nd, 3rd persons singular and the indefinite pronouns. It should be noted that the indefinite pronoun bears a high tone in the declarative in (4di), and the high tone changes to a low tone in (4dii). Thus, the low tone in (4dii) on the indefinite pronoun should not be confused with the question particle *à*. The plural pronouns have a question marker (QM) *à* which occurs immediately after the pronouns as in (5) below.

- (5) a. i) **Ányí** **gà-rà** **úlò** **ákwúkwó.**
 1PL go-PST house book
 'We went to school.'
- ii) **Ányí** **à** **gà-rà** **úlò** **ákwúkwó?**
 1PL QM go-PST house book
 'Did we go to school?'
- b. i) **Únú** **zùtá-rà** **m̃** **ákwà.**
 2PL buy-PST me cloth
 'You bought me [a piece of] cloth.'
- ii) **Únú** **à** **zùtá-rà** **m̃** **ákwà?**
 2PL QM buy-PST me cloth
 'Did you buy me [a piece of] cloth?'
- c. i) **Há** **bìà-rà** **n'ábàlì.**
 3PL come-PST P night
 'They came at night.'
- ii) **Há** **à** **bìà-rà** **n'ábàlì?**
 3PL QM come-PST P night
 'Did they come at night?'

Distinction can also be made between yes-no questions that begin with pronouns and those that begin with noun or R-expressions. For those beginning with pronouns, the above examples clearly show how the questions are constructed. On the other hand, for questions beginning with nouns, the nouns take a pronoun. The pronoun follows the noun and agrees both in number and person of the preceding noun. This is the phenomenon of resumptive pronoun reanalysed as pronominal

subject clitic (Anyanwu 2012). Such pronouns according to Sanusi (2002) always co-occur with the subject determiner phrases (DPs) as subject-agreement markers in grammatical sentences. The DP is made up of a determiner and a noun complement (Obiamalu 2013a; Amaechi 2014). The principle of recapitulation requires that whenever a subject DP starts a sentence, it is followed by a pronoun that is co-referential with the subject DP.

The subject DPs are followed by the pronouns with low tone for questions as in the singular personal pronoun in (4) above. And for the plural persons, the resumptive pronoun following the subject DP still has the QM after it as in (6cii & 6dii). Consider the examples in (6) below.

- (6) a. i) **Èméká hù-rù m̄ n'ányá.**
Emeka see-PST me P eye
'Emeka loves me.'
- ii) **Èméká ì hù-rù m̄ n'ányá?**
Emeka 2SG.QM see-PST me P eye
'Emeka, do you love me?'
- b. i) **Ímírì kà nà-ézò.**
water COMP PROG-rain
'It is still raining.'
- ii) **Ímírì ò kà nà-ézò?**
water 3SG.QM COMP PROG-rain
'Is it still raining?'
- c. i) **Àkúnnà nà Ígózí nà-ábíá.**
Akunna and Ngozi PROG-come
'Akunna and Ngozi are coming.'
- ii) **Àkúnnà nà Ígózí únù à nà-ábíá?**
Akunna and Ngozi 2PL QM PROG-come
'Akunna and Ngozi are you coming?'
- d. i) **Íné gī nà ínnà gī nò n'úlò.**
mother your and father your stay P home
'Your parents are at home.'
- ii) **Íné gī nà ínnà gī há à nò n'úlò?**
mother your and father your 3PL QM stay P home
'Are your parents at home?'

The resumptive pronoun is only found in yes-no interrogative sentences in Igbo. It is not attested in declarative sentences as could be found in other languages such as Hausa, Batonu, Ebira, etc. where the concept of resumptive pronoun is used in forming statements (cf. Sanusi, 2002).

From the above, it is clear that at the phonetic form (PF) level, the only difference between the sentences (i) and (ii) in (4a-c) is the tonal change on the initial subject pronoun from a high tone in the declarative to a low tone in the interrogative. The low tone triggers the question reading. Also, the tonal process in yes-no question seems to be limited to singular subject pronouns as exemplified in examples (4) above. In the examples involving singular subject pronouns, Igbo displays a syntactic low tone that is necessarily associated to yes-no questions. The subject pronoun bearing

the low tone occurs sentence-initially when the subject DP is a pronominal. In the case of a noun beginning the sentence, there is always a resumptive pronoun referring back to the subject DP as shown in example (6). For the plural subject pronouns in (5), no such tonal change is found. It could also be observed that the singular subject pronouns are monosyllabic, consisting of only a vowel segment. The question thus is: how is it that the sentence-initial tonal change on the singular subject pronoun is not found in the plural counterparts? What is noticed with the plural pronouns is a kind of a particle following the subject DP and giving them the interrogative discourse reading. Which is the question marker: is it the low tone found on the singular subject pronouns or the particle found after the plural subject pronouns? Or are there two question markers in Igbo yes-no questions?

4.1 The yes-no question marker in Igbo

According to Aboh (2004; 2010), yes-no question in Gungbe is marked by a low tone on the final tone-bearing element in the clause. But it is not the case in some other Gbe languages (e.g. Fongbe) which use full segments with tone as question marker. Aboh thus argues and suggests “that certain syntactic tones could be vestiges of functional morphemes that have been partially deleted as the language evolved. This would mean that syntactic tones generally develop from full morphemes” (2010:4).

In this analysis, I argue that the yes-no question marker (QM) in Igbo is the low tone particle *à* found after plural subject DP.

- (7) **Ányí** **à** **gà-rà** **úlò** **ákwúkwó?**
 1PL QM go-PST house book
 ‘Did we go to school?’

It is shown that the question marking tone found with the singular subject DP is the low tone on the QM *à*. The analysis is that the tone-bearing segment gets deleted in the singular subject DP, but the tone does not. This interrogative low tone that is retained replaces the high tone on the preceding subject pronoun of the singular subject DP.

- (8) a. **Ó** **hù-rù** **Àdá.**
 3SG see-PST Ada
 ‘S/he saw Ada.’
- b. **Ó** **à** **hù-rù** **Àdá.**
 3SG QM see-PST Ada
- c. **Ó** **hù-rù** **Àdá.**
 3SG QM_[Tone] see-PST Ada
- d. **Ò** **hù-rù** **Àdá?**
 3SG.QM see-PST Ada
 ‘Did s/he see Ada?’

The examples in (8) above picture the derivation process for the singular subject DP with pronominals. In the case of singular subject DP which is R-expression, the claim is that the question marking tone needs to be associated with a morpheme in the language and as such it targets the singular pronominal clitics. The high tone on the clitic is deleted, and the question marking low tone replaces the deleted tone. The reason for the leftward movement of the question low tone is unclear but this is also

what happens in negative structures where in addition to the negative suffix, the singular pronominal clitics obligatorily bear a low tone (Obiamalu 2013b)

- (9) a. **Ányí** **kù-rù** **ókà.**
 1PL plant-PST maize
 ‘We planted maize.’
- b. **Ányí** **à** **kù-rù** **ókà?**
 1PL QM plant-PST maize
 ‘Did we plant maize?’
- c. **Ò** **bù** **ókà** **kà** **ányí** **kù-rù.**
 3SG.QM be maize FOC 1PL plant-PST
 ‘Is it maize that we planted?’

From the sentences in (9) above, it is seen that it does not really matter whether it is the subject DP or the object DP that is being questioned. The question-marking low tone is still found occurring on the initial tone-bearing element as in (9c). This is further exemplified in (10) below.

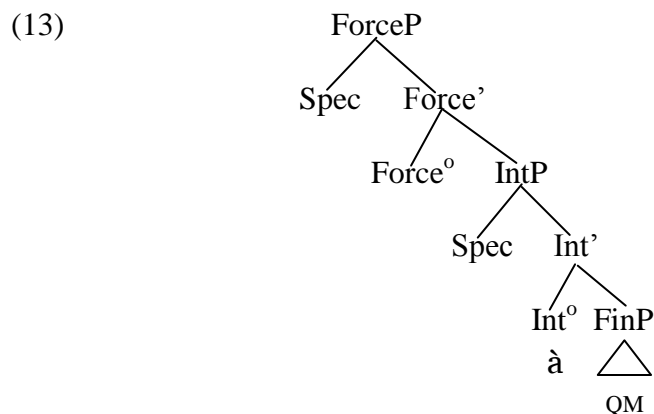
- (10) a. **Òbí** **nyè-rè** **Àdá** **àkwá.**
 Obi give-PST Ada egg
 ‘Obi gave Ada [an] egg.’
- b. **Òbí** **ò** **nyè-rè** **Àdá** **àkwá?**
 Obi 3SG.QM give-PST Ada egg
 ‘Did Obi give Ada [an] egg?’
- c. **Ò** **bù** **Àdá** **kà** **Òbí nyè-rè** **àkwá?**
 3SG.QM be Ada FOC Obi give-PST egg
 ‘Is it Ada that Obi gave [an] egg?’
- d. **Ò** **bù** **àkwá** **kà** **Òbí** **nyè-rè** **Àdá?**
 3SG.QM be egg FOC Obi give-PST Ada
 ‘Is it [an] egg that Obi gave Ada?’

Sentence (10a) above is a ditransitive construction involving double objects. Each of the objects is being questioned in (10c&d), and a yes-no answer is required. In forming the yes-no questions involving the objects, the objects are moved to the left periphery of the clause. The pronoun **Ò** in the **Ò bù** cleft in (10c&d) bears the question marking low tone. The moved elements are immediately followed by the focus marker **kà**. The object DP question is similar to a focus construction in that it involves a leftward movement of the DP being focused in (10c) **Àdá** and in (10d), **àkwá** to a position left adjacent to the morphologically realized focus marker, **kà** and immediately after the **Ò bù** cleft.

The IntP is a distinct phrase within the C-system. Aboh (2004) notes that an immediate prediction of Rizzi’s (1997) hypothesis is violated by not having the question marker and the complementizer in Gungbe in complementary distribution. This is also the case in Igbo. Consider the following example (11) in Igbo.

- (11) **Ó** **jù-rù** **mà** **ányí** **à** **gà-rà.**
 3SG ask-PST that 1PL QM go-PST
 ‘S/he asked whether we went.’

In example (11) above, the complementizer *mà* ‘that’ which is traditionally assumed to occupy Force^0 is not in complementary distribution with the QM *à* found in the embedded clause. This leads to the argument that the complementizer *mà* ‘that’ and the QM *à* do not compete for the same position. Following Rizzi (2001) and Aboh (2004), I argue that the QM encodes the interrogative force that is associated with the Int^0 head, which projects within the C-system, and whose specifier hosts the subject DP.



ForceP (the highest projection of the C-system) immediately dominates the interrogative projection, IntP whose head, Int^0 hosts the QM. The low tone, which in the case of questions involving singular subject DP is a clitic, as it is unable to stand alone as an independent form for phonological reasons but attaches to the singular subject pronoun. It is not an affix as it belongs to the category of pronoun.

5. Conclusion

The interface between phonology and syntax, especially in African languages, has shown many interesting phenomena. The present study is on yes-no questions in Igbo, where we find an interplay between these two levels of linguistics. In yes-no questions with a singular subject DP, the difference between a statement and a question in Igbo is the change from a high tone to a low one. But this is not the case in the plural where a question particle is found. It is argued that the question particle found in the plural is the yes-no question marker in the language, and that the low tone found in the singular is the question element that evolves from the question marker after the phoneme bearing the tone has been deleted, and that this tone replaces the tone on the preceding singular subject pronoun, thereby giving the interrogative meaning.

Abbreviations

| | | | |
|------|------------------------|-------|--------------------|
| 1SG | First person singular | DP | Determiner phrase |
| 2SG | Second person singular | FOC | Focus marker |
| 3SG | Third person singular | FUT | Future tense |
| 1PL | First person plural | INDEF | Indefinite pronoun |
| 2PL | Second person plural | PROG | Progressive aspect |
| 3PL | Third person plural | PST | Past tense |
| ATR | Advanced tongue root | P | Preposition |
| COMP | Complementizer | Q | Question |
| | | QM | Question marker |

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