Polar Questions in Ǹjɔ̀-Kóo

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Abstract
The claim in some quarters is that polar question marking particles cross-linguistically occur either clause-finally or clause-initially. This paper, adopting the minimalist framework of generative syntax, investigates polar questions in Ǹjɔ̀-Kóo and observes that **yè** which appears to mark such questions in the language is immediately preceded by the subject DP. The paper argues that a clause final high-tone that shows up in such questions in the language cannot be the marker of polar question because the same item occurs in focus constructions. The paper therefore proposes that syntax of polar questions in Ǹjɔ̀-Kóo involves two probes: *Inter* (interrogative head) and *Emph (*emphatic head), with each capable of triggering displacement operation. The first, **yè**, has an Inter-EPP feature which is valued and deleted by moving the matching goal to its specifier position; while the second, the clause final high-tone, has an EPP

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feature that provokes pied-piping of TP to spec-EmphP. Given the fact that any clause expression containing the high-tone without **yè** does not pass as polar question in Ǹjọ̀-Kóo, the paper concludes that **yè** only licenses the occurrence of the high-tone in the question clause.

Keywords: polar question marking; interrogative force; minimalist framework; EPP feature; clause final high-tone[1].

1. Introduction
Aboh and Pfau (2011) claim that question marking particles, cross-linguistically, occur either clause initially or clause finally as evident in Lele, Gbè, Nweh, and Yorùbá examples in (1a-f).

1. (a)   Wey ba   é   gà?   Lele
         Who Foc go Inter
         'Who went away?'

   (b)   Me   ba gol díˊ   gà?
         What Foc see 3sg Inter
         'What did you see?'
                            (Aboh and Pfau 2011)

   (c)   Sẹ́tò kò   wâ?   Gungbe
         Seto already come-Inter
         'Has Sẹ́tò arrived yet?'

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(d)   Njikèm à kΣ[?] npfΣ̀t akèndɔŋ ŋ ?   Nweh
      Njikem Agr Tns eat   plantain Inter
      'Did Njikem eat plantain?'
                              (Nkemnji 1995)

(e)   Ǹjɛ́ Adé dé ní àná ?   Yorùbá
      Inter Ade arrive in yesterday
      'Did Ade arrive yesterday?'

(f)   Olú   wá   bí ?
      Olu   come Inter
      'Did Olu come?'

However, evidence from Ǹjọ̀-kóo[2] shows to the contrary that the said particle neither occurs clause-finally nor clause-initially but rather immediately follows the subject DP of the clause, as exemplified in (2aii and bii) which are polar question counterparts of the declarative sentences in (2ai and 2bi).

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[2] Ǹjọ̀-Kóo is the name proposed by Olaogun (2016) for a group of relatively mutually intelligible speech forms formally called Amgbɛ́/Arigidi-Cluster spoken in the North-western part of Akoko in Ondo State, Nigeria. *Ǹjọ̀-Kóo* is spoken in at least nine communities, namely; Ìgáṣí, Arigidi, Eruṣú, Oyín, Urò in Àjọwá, and Àfá, Ùdò, Ògè, Àjè in Òkèàgbè. *Ǹjọ̀-Kóo* is a compound name formed from **Ǹ jọ̀ o** and **Ǹ kó o** (or **Ǹ ghó o** the variant of **Ǹ kó o** used in Urò) which is a form of greeting equivalent to **pɛ̀lɛ́ o** in Standard Yoruba.

2. (ai) Adé   vọ́dí   ura.   Àfá[3]
        Ade   arrive yesterday
        'Ade arrived yesterday.'

  (aii) Adé   yè   vọ́dí   ura[4] ?
        Ade INTER arrive yesterday+Emph
        'Did Ade arrive yesterday?'

  (bi) Títí bọ   ùji.
        Títí drink water
        'Titi drank water.'

  (bii) Títí yè   bọ   ùji   í?
        Titi Inter drink water Emph
        'Did Titi drink water?'

The polar question morpheme in the sentences in (2) is **yè** and as hinted earlier, it occurs immediately after the subject DP. The paper also advances reasons why the clause final high tone in examples (2aii and bii) cannot be a polar question marker in the language.

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[3] Àfá is a dialect of Ǹjọ̀-kóo, the language spoken in the Akoko North-west, Ondo state, Nigeria. In this paper, we use Àfá dialect as representative of the Ǹjọ̀-kóo language, except when explicitly mentioned.
[4] **Úrá** has two high tones in citation form but is correctly written as **ura** here because the language disallows a sequence of HHH. When this happens, its phonological rule requires that the last two HH be lowered than the first.

2. Theoretical Framework

This study adopts the Minimalist Program framework as proposed in Chomsky (1995, 1998 and 2002). Minimalist Program is the most recent version of transformational generative grammar which employs fewer linguistic apparatus to construct syntactic structures. The apparatus are operations *select*, *merge*, and *agree*.

Operation select takes required word items from the lexicon and put them in the numeration to build syntactic structure. Numeration is a place where selected items needed for building syntactic structures are stored. The lexical items in the numeration are in turn put together by an operation dubbed merge.

Operation Merge and Agree. Given that operation *move* is a form of merge and that movement of features is replaced by Agree, the computational system that builds the syntactic tree now consists of two operations namely, *merge* and *agree*.

Merge is the operation that combines syntactic elements to form larger structures. It is binary and recursive in nature-building operation which put together selected lexical items from the numeration. Operation merge is of two kinds, external and internal. External merge involves merge operation that originates from the numeration while internal is a syntactic structure operation that affects syntactic objects that are already introduced into the derivation.

Agree is a non-lexicalist approach to feature interpretability in the lexicon. The Agree method, unlike move-F system assumes that only [+interpretable] features of lexical elements are already fully specified in the lexicon before they enter the

derivation, whereas elements with [-interpretable] features acquire their features in the course of the derivation. Given the appropriate domain for features matching, Agree allots values to unvalued features in order to satisfy morphological requirements while at the same time deleting such [-interpretable] features for LF purposes. Crucially, Agree is the operation that establishes a relation between two different linguistic elements, *probe* and *goal*, in the syntactic structure through which feature values can be exchanged. A probe is a head with [-interpretable] features and a goal is an element with matching [+interpretable] features (Hornstein et al. 2005: 317).

3. Polar Question Defined
According to Radford (1988:462), questions in natural language can be classified into a number of types. One major typological division for example, is between polar alias yes-no questions and wh-questions. Yes-no questions are so-called because they permit 'yes' or 'no' (or their counterparts cross linguistically) as appropriate answers. Following Nkemnji (1995:149), the term wh-questions generally refer to questions that involve independent interrogative words such as **ko** 'what', **konè** 'who', **kòfòn** 'when' as exemplified in (3b), (4b), and (5b) which are interrogative counterparts of the simple declarative sentences in (3a), (4a), and (5a).

> 3. (a) Títí   bọ   ùji.
>   Títí   drink   water
>   'Titi drank water.'

   (b)   Ko   Títí   yè   bọ ?
         What Titi Inter drink
         'What did Titi drink?'

4. (a) Igbé̩è̩ji uwan ju ò̩gè̩dè̩.
        the   child eat plantain
        'The child ate plantain.'

   (b) Konẹ yè   ju   ò̩gè̩dè̩?
         Who Inter eat   plantain
         'Who ate plantain?'

5. (a) Igbé̩è̩ji uwan ju ò̩gè̩dè̩   úrá.
        The child eat   plantain   yesterday
        'The child ate plantain yesterday.'

   (b) Kò̩fò̩n igbé̩è̩ji uwan yè   ju   ò̩gè̩dè̩?
         when   the   child Inter eat plantain
         'When did the child eat plantain?'

While yes-no questions generally refer to questions that do not involve the use of independent interrogative words, as illustrated in (6a-f).

6.   (a)   Igbéèji uwan yè ju ògèdè é?
             the   child Inter eat plantain EHT[5]
             'Did the child eat plantain?'

      (b) Ojó yè   vè   é?
         Ojo Inter go Emph
         'Did Ojo go?'

      (c) Títí yè   bọ   ùji   í?
         Titi Inter   drink water Emph
         'Did Titi drink water?'

      (d) Olú yè   wọ́?
         Olu Inter cry-Emph
         'Did Olu cry?'

      (e) Olú yè   da àju   ú?
         Olu Inter buy yam Emph
         'Did Olu buy yam?'

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[5] This extra high tone (EHT) is taken to be an Emphatic head in this work with the assumption that question and focus constructions are generally emphasized. The high tone is usually not realized in instances like:
         Òjó yè vá   'Did Ojo come?'
         Òjó yè ké é   'Did Ojo do it?'
Given that the utterances independently end in high toned words/morphemes, the EHT is also used here to indicate that the tone is absent in the declarative sentences from which the yes-no questions are derived. It does not refer to the pitch level of the high tone in the clause.

 (f) Na yè ba bàbá?
     You Inter greet daddy-Emph
     'Did you greet daddy?'

It is observed that the form of the question morpheme in the language differs from one dialect to another. Some use **yè** while others use **yẹ̀** as evident in the examples (7a-g).

 7. (a) Adé yè í da àju?   Àjè
     Ade Inter prog buy yam
     'Was Ade buying yam?'

  (b) Òjó yè gà ju ọ̀gẹ̀dẹ̀ ẹ́?
     Ojo Inter Fut eat plantain Emph
     'Will Ojo eat plantain?'

  (c) Kòsan Adé yè dẹ ìsi?
     Where Ade Inter buy yam
     'Where did Ade buy yam?'

  (d) Ko Ade yè í dà?   Oyín
     What Ade Inter prog buy
     'What was Ade buying?'

  (e) Òjó yè gà ju ọ̀gẹ̀dẹ̀ ẹ́?
     Ojo Inter Fut eat plantain Emph
     'Will Ojo eat plantain?'

(f) Òjó yẹ̀ gà ju ọ̀gẹ̀dẹ̀ ẹ́?   Ùdò
Ojo Inter Fut eat plantain Emph
'Will Ojo eat plantain?'

(g) Adé yẹ̀   vọ́dí   ura?
Ade Inter arrive yesterday-Emph
'Did Ade arrive yesterday?'

Apart from this, the form of the question morpheme changes in some dialects in perfective clause. This implies that its form is syntactically conditioned which is why the Inter should be regarded as a distinct category that projects InterP. If one considers the following examples in (8):

8. (a) Ade yà á dẹ̀ ìsí   Àjè
Ade Inter Perf buy yam-Emph
'Has Ade bought yam?'

(b) Òjó   yà á vá   Ùdò
Ojo   Inter Perf come-Emph
'Has Ojo come?'

besides the fact that the inflectional relationship between Asp and Inter shows that the latter is a distinct category (compare 7 and 8), it is also observed that in yes-no clause, the question particle consistently precedes tense and aspect. This supports the general claim that left peripheral position is above the TP (Radford 2009:488).

Further observation shows that when a declarative sentence that contains a final syllable L or M toned verb is turned into a polar question, it is either there is some kind of tonal manipulation where the high tone overrides the original tone of the verb or the high tone follows the verb as exemplified in (9) through (13).

9. (a) Ùji dà.
   rain fall
  'The rain fell.'

 (b) Ùji yè dá?
   rain Inter fall-Emph
   'Did the rain fall?'

 (c) Ùji yè dà á?
   rain Inter fall Emph
   'Did the rain fall?'

10. (a) Olú wọ̀.
   Olu cry
   'Olu cried.'

 (b) Olú yè wọ́?
   Olu Inter cry-Emph
   'Did Olu cry?'

 (c) Olú yè wọ̀ ọ́?
   Olu Inter cry Emph
   'Did Olu cry?'

11. (a) Olú wọn.
          Olu laugh
          'Olu cried.'

    (b) Olú   yè   wọ́n?
         Olu Inter laugh-Emph
         'Did Olu cry?'

    (c) Olú   yè   wọn   ọ́n?
         Olu Inter laugh Emph
         'Did Olu cry?'

12. (a)   Mu sẹ̀n.
           I   walk
           'I walked.'

    (b) Mu   yè   sẹ̀n   ẹ́n?
         I   Inter walk Emph
         'Did I walk?'

    (c) Mu   yè   sẹ́n?
         I   Inter walk-Emph
         'Did I walk?'

13. (a)   Bólú vè.
           Bolu go
           'Bolu went.'

   (b)   Bólú   yè   vè   é?
          Bolu Inter   go   Emph
          'Did Bolu go?'

   (c) Bólú   yè   vé ?
        Bolu Inter go-Emph
        'Did Bolu go?'

Sentences with pronoun subjects also exhibit this tonal behaviour as illustrated in examples (14) through (18) below.

    14. (a) Vá   wò.
            they   cry
            'They cried.'

     (b) Vá   yè   wó?
        they Inter cry-Emph
        'Did they cry?'

     (c) Vá   yè   wò   ó?
        they Inter   cry Emph
         'Did they cry?'

   15. (a) Mu   ràn.
          I   know
          'I knew.'

     (b) Mu   yè   rán?
        I   Inter   know-Emph

'Did I know?'

(c)   Mu   yè   ràn   án?
        I   Inter   know Emph
        'Did I know?'

16. (a) Na   vè.
        you   go
        'You went.'

  (b) Na   yè   vé?
        You Inter   go-Emph
        'Did you go?'

  (c) Na   yè   vè é?
        You Inter   go Emph
        'Did you go?'

17. (a) Ú   vè.
        s/he   go
        'S/he went.'

  (b) Ú   yè   vé?
        s/he Inter   go-Emph
        'Did s/he go?'

  (c) Ú   yè   vè é?
        s/he Inter   go Emph
        'Did s/he go?'

18. (a) E̩mè̩n   ràn.
       You (pl) know
       'You knew.'

 (b)   E̩mè̩n yè   rán?
       you(pl) Inter know-Emph
       'Did you know?'

 (c)   E̩mè̩n   yè   ràn   án?
       You (pl) Inter know   Emph
       'Did you know?'

Sentences in (9a-13a) and (14a-18a) are declaratives while those in (9b &c to 13b&c) and (14b&c to 18b&c) are their interrogative counterparts.

4. Why the Clause-Final High-Tone is not a Question Marker

Given the cross-linguistic claim that question morphemes in both polar questions and content questions occur either clause-finally or clause-initially, one may be tempted to assume that the clause-final high tone that always shows up in Ǹjò̩-Kóo polar questions is also a question marker. There are however empirical and theoretical reasons why this position may not be tenable. The most fundamental of the reasons is that the existence of the high tone is licensed by the presence of the question morpheme in the polar questions. In other words, the high tone cannot exist without the question morpheme in Ǹjò̩-

Kóo polar questions. This explains the possible misinterpretation in (19a-d) and the ungrammaticality in (19e-f).

19. (a) ꜛOlú ju ọ̀gẹ̀dẹ̀ ẹ́
Olu eat plantain Emph
'OLU ate plantain.'

(b) ꜛỌ̀gẹ̀dẹ̀ Olú ju ú
ọ̀gẹ̀dẹ̀ Olu eat Emph
'Olu ate PLANTAIN.'

(c) ꜛAdé da bàtà á
Ade buy shoe Emph
'ADE bought a pair of shoes.'

(d) ꜛBàtà Adé dà á
Shoe Ade buy Emph
'Ade bought a pair of SHOE.'

(e) *Ayọ̀ wọ́
'Ayo laugh.'

(f) * Ẹ́mẹ̀n ràn
'You (pl.) know.'

The sentences in (19a-d) would be interpreted as focus constructions rather than interrogative clauses because the focus marker in Ǹjọ̀-Kóo may not be phonetically realized but the occurrence of the clause final high tone is compulsory.

Similarly, (19e&f) would be adjudged ungrammatical as questions.

The fact that the clause final high tone morpheme also occurs in focus constructions which are non-interrogative is another empirical fact that dismisses the seeming assumption that it is a question particle. As a matter of fact, none of the constructions in (9) is interrogative because the morpheme that expresses interrogative force is absent in them. Also, theoretically, since we consistently have the question particle **yè** showing up in the polar questions, claiming that the H tone is a question marker would amount to saying the clause is double headed. Such claim violates Extended Endocentricity Principle which states that every phrase is a projection of a single head word category, and every word category projects into a corresponding phrase category. Lastly, while the clause final high tone is absent in wh-questions, **yè** consistently occurs there without any compromise in the interrogative reading of such constructions. This is evident in the well-formedness of examples (20a–f) and the ungrammaticality of (20d&e).

20. (a) Kòfọ̀n Òjó yè   wọ̀?
        When Ojo Inter cry
        'When did Ojo cry?'

    (b) Konẹ ẹ̀   sẹ̀n?
        Who Inter run
        'Who ran?'

(c) Konẹ ẹ̀ wọn?
     Who Inter laugh
     'Who laughed?'

(d) *Kère úrọ́ ńdọ́ yè bẹrin ín?
     Which type work Inter this Emph
     'Which type of work is this?'

(e) *Kàwán Adé yè dà á?
     How-many Ade Inter buy Emph
     'How many did Ade buy?'

(f) *Kàwán Adé yè dá?
     How Ade Inter buy-Emph
     'How many did Ade buy?'

5. The Syntax of Interrogatives

Assuming Split-CP hypothesis, the general characterization is that interrogatives merge in InterP. Given this, two issues will be addressed in this section: (1) if interrogatives merge in InterP within the left periphery, how come the interrogative head shows up immediately after the subject within TP in the overt syntax given head-complement word order in Ǹjò̩-Kóo? (2) what exactly does the syntactic representation of question constructions look like in Ǹjò̩-Kóo?

On the issue of word order, I propose raising/movement of the DP subject of matrix TP to the specifier position of InterP. The point is that Inter head which serves as the probe has an

edge or a strong [EPP] feature which attracts it as goal to the spec-InterP. This implies that the [interrogative] feature must be checked or valued before spell-out for the derivation to be convergent. This then leads us to the second issue:, if the subject of TP raises to Spec-InterP, what is the exact syntax of that construction in Ǹjǫ̀-Kóo?
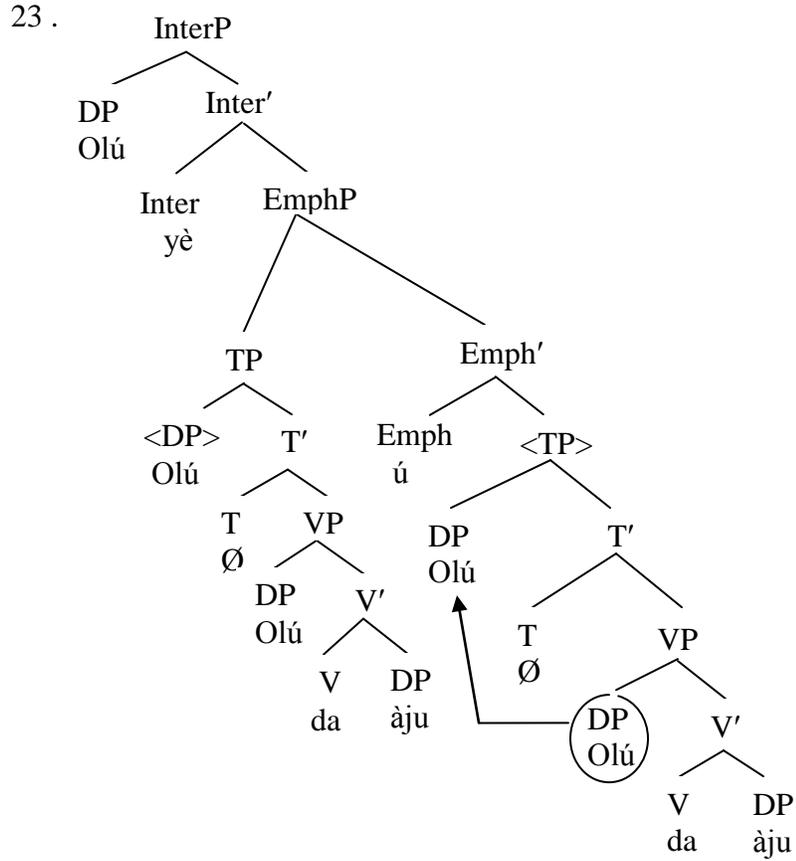
5.1. Derivation of Ǹjǫ̀-Kóo Polar Questions
Adopting the cartography approach, I propose following Rizzi (1997, 2001) and Aboh (2004) that interrogative force is a specification of the functional head in Inter^0 encoding the feature [Interrogative] that projects between ForceP and FinP, as illustrated in (21).

21. Force…> Inter…> Topic…> Focus…> Finiteness.

I therefore propose that a simple yes-no question is headed by the Inter^0 which is morphologically realized as **yè** in Ǹjǫ̀-Kóo. This implies that a yes-no question like (6e) repeated here as (22) should be derived as sketched in (23).

22.   Olú yè da àju ú
         Olu Inter buy yam Emph
         'Did Olu buy yam?'

23 .

InterP

DP
Olú

Inter′

Inter
yè

EmphP

TP

<DP>
Olú

T′

T
Ø

VP

DP
Olú

V′

V
da

DP
àju

Emph′

Emph
ú

<TP>

DP
Olú

T′

T
Ø

VP

DP
Olú

V′

V
da

DP
àju

The syntax of Ǹjò̩-Kóo polar questions therefore involves two probes, each of which provokes displacement operations. The polar question in (23) is derived thus: first, the verb **da** is

merged with its DP complement **àju** 'yam' to satisfy the c-selection requirement of the head while the subject DP **Olú** is second merged in Spec-VP (in line with VP- internal subject hypothesis) to satisfy the EPP demand of the head; while then T head is merged with the VP to project T-bar. At this point, T head becomes the probe which searches its c-command domain for a matching goal to attract to Spec-TP, so as to value the unvalued/uninterpretable feature. The subject DP, **Olú**, being the potential and active goal with an unvalued nominative case, is attracted to spec-TP and the unvalued case feature is valued and deleted. Then the Emph head is externally merged with the TP to meet its c-selection condition. The TP then get pied-piped to Spec-EmphP to fulfill the EPP feature of the Emph head that is morphologically realized as the clause-final high tone morpheme. There is an empirical reason why the pied-piping of the whole TP to spec-EmphP is licensed in this structure. Specifically, if the whole TP is not pied-piped, the correct word-order would not be generated.

The derivation proceeds by externally merging Inter head which is realized as **yè** to EmphP to project Emph-bar. At this stage, the Inter head becomes the probe which searches its c-command domain for an active goal to move to its Spec so as to value the unvalued feature. The only active goal available is the subject DP, **Olú**, being the only constituent licensed at Spec-InterP. The probe has [Inter-EPP] feature which is valued and deleted by moving the goal **Olú** to its specifier position.

6. Conclusion

This paper has given a descriptive analysis of the structure and derivation of polar questions in Ǹjò-Kóo, using the minimalist framework. The paper challenged the cross-linguistic claim that question particles occur either clause-initially or clause-finally and concluded, given empirical evidence, that polar question markers do not only occur clause-initially or clause-finally but can also be immediately preceded by subject DPs. It also advanced both empirical and theoretical reasons as to why the clause final high-tone that always shows up in Ǹjò-kóo polar questions should not be considered a question marking particle.

References

Aboh, E. 2004. *The Morpho-Syntax of Complement-head Sequence. Clause Structure and Word Order.* New York: Oxford University Press.

Aboh, E. & R. Pfau 2011. What's a wh-word Got to do with it? B. Paola (ed.) *The Cartography of Syntactic Structures.* New York: Oxford University Press 5, 91-124.

Chomsky, N. 1995. *The Minimalist Program.* Cambridge: MIT Press.

_____. 1998. The Minimalist Inquiries: the Framework'. *MIT Occasional Papers in Linguistics*, No 15.

_____. 2002. *On Nature and Language.* Cambridge: Cambridge University Press.

Hornstein, N., Nunes, J. & K. Grohmann 2005. *Understanding Minimalism.* New York: Cambridge University Press.

Nkemnji, M. 1995. Heavy Pied-piping in Nweh. PhD Thesis,
  Dept. of Linguistics, University of California.
Olaogun, S. O. 2012. Clausal Typing Hypothesis and the Syntax
  of Interrogatives in the Amgbé̩ Language. PhD Seminar
  paper, Dept. of Linguistics and African Languages,
  University of Ibadan.
_____. 2016. Information Structural Categories of the
  Ǹjò̩-Kóo Language in Akoko North-West of Ondo State,
  Nigeria. PhD Thesis, Dept. of Linguistics and African
  Languages, University of Ibadan.
Radford, A. 1988. *Transformational Grammar.* Cambridge:
  Cambridge University Press.
_____. 2009. *Analysing English Sentences: a Minimalist
  Approach.* Cambridge: Cambridge University Press.
Rizzi, L. 1997. The Fine Structure of the Left Periphery. L.
  Heageman (ed.) *Element of Grammar*: *Handbook of
  Generative Syntax.* Dordrecht: kluwer.
_____. 2001. On the Position of "Int(errogative)" in the Left
  Periphery of the Clause. G. Cinque and G. Salvi (eds.)
  *Current Studies in Italian Syntax: Essays offered to
  Lorenzo Renzi.* Amsterdam: Elsevier North-Holland.