Constraints on Wh-Question Formation in Gichuka

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ABSTRACT

Ross (1976) argued that *wh*-movement is not unbounded. This paper investigated wh-question formation in Gichuka, and checked whether wh-movement is constrained/bounded by the complex NP constraint, the subject condition, the *wh*-island constraint and the coordinate structure constraint. The results indicate that *wh*-movement is constrained by these constraints except the complex NP constraint. This paper therefore is a contribution to the principles and parameters of universal grammar.

Keywords: *Wh*-movemen*t, Wh- in situ,* Constraints, Gichuka, Bantu

CONSTRAINTS ON *WH* MOVEMENT

Complex NP Constraint

Gichuka, like many other languages of the world conforms to constraints seen to restrict *wh*-movement in other languages. One of these constraints is the Complex Noun Phrase Constraint. This constraint prohibits *wh*-movement out of a complex noun phrase.

Consider the sentence in (1).

(1) John made the claim that he gave Peter a book.

'the claim that he gave Peter a book' is a complex noun phrase. To question 'Peter' by *wh*-movement is impossible since it is within the complex noun phrase, therefore, (2) is ungrammatical.

*(2) Who did John make the claim that he gave the book?

Note that even when we leave the *wh- in situ* the sentence is ungrammatical:

*(3) John made the claim that he gave **who** the book?

A complex NP constraint therefore cannot be ameliorated by use of wh- *in situ* in English. Traditionally, the ungrammaticality of the above sentence was explained using the subjacency principle (Chomsky 1973). The subjacency principle prohibits movement of an *wh-* phrase across more than two bounding nodes, where the bounding nodes are an NP and IP. In current practice, the ungrammaticality of (2) is attributed to the principle of relativized minimality (Rizzi, 1999) or the minimal link condition (Chomsky, 1995, 2000). Consider in contrast (4) where there is no complex noun phrase.

(4)John claimed that he gave Peter the book.

It is possible to question 'peter' in the above sentence since there is no complex noun phrase. Therefore (5) is grammatical.

(5) Who did John claim that he gave the book?

It's ungrammatical when we use *wh*in situ to ask the above question as shown in (6).
*(6) John claimed that he gave who the book? (*wh* insitu)

English in general does not allow wh-*in situ,* except with echo questions.

Consider the Gichuka Sentence in (7) containing a complext NP 'malalamiko ati nianenkere Peter mbuku'

(7) John aruthire malalamiko ati nianenkere Peter mbuku.
 John made the claim that he gave Peter a book
 'John made the claim that he gave Peter a book.'

In contrast to English, In Gichuka, 'Peter' an element from within the complex noun phrase can be questioned in situ (7) by use of full wh-movement (8) or by use of intermediate *wh*-movement (9).

(7) John aruthire malalamiko ati anenkere **uu** mbuku
 John made the claim that he gave who book
 'Whom did John make the claim that he gave the book?' (*wh* in situ)

(8) N-uu John aruthire malalamiko ati nianenkere mbuku?
 f-who John made   the claim that he gave book?
 'Whom did John make the claim that he gave the book?' (full *wh* movement)

 (9) John **n-uu** aruthire malalamikoati nianenkere mbuku?
  John f-who made   the claim that he gave book?
  'Whom did John make the claim that he gave the book?' (intermediate *wh* movement)

In the intermediate strategy, the wh-phrase moves to a position between the subject and the verb. Muriungi (2003; 2005, 2010), Abels and Muriungi (2008), and Kathomi (2013) analyzes this sentence as involving movement of the *wh*-phrase to the Specifier of a Focus Phrase, followed by movement of the subject NP to the Specifier of a Topic Phrase, located above the Focus Phrase in the syntactic tree (Cf. also Rizzi, 1997).

From the data in (8-9), it is clear that the complex NP constraint does not apply in GIchuka, as both *wh- in situ*, and *wh*-movement are allowed. Note here a fundamental morphological difference – a moved *wh*-phrase bears a focus maker (glossed ad f) but an *in situ* one does not.

Subject Condition
This constraint states that movement out of a subject is impossible (Huang, 1982). For example in the sentence in (10a) it is impossible to question 'John' which is part of the subject, hence the ungrammaticality of (10b). One can only question the whole subject as in (10c).

10 (a) <u>That the Police will arrest John</u> is certain
  subject
*(b) Who is that the police will arrest certain? (c) What is certain?

Consider the Gichuka sentence in (11), with a complex subject:

(11)Ati   bolici makambat John niuma
      that police will arrest John   is true
      'That police will arrest John is certain'

To question '**John**' is impossible, whether by use of full *wh*-movement (12a), intermediate strategy (12b) or *wh- in situ* (12c).

*12(a) **Nuu** bolici makambata niuma
         Who police will arrest is certain
         'Who is that the police will arrest certain?'(Full *wh* movement)
         *(b) Bolici **nuu** makambata niuma?
         'Police who will arrest is certain'
          "Who is that the police will arrest certain? (Intermediate movement)
         *(c) Bolici makambata **uu** niuma

Police will arrest who is certain
'Who is that the police will arrest certain?' (wh- *in situ*)

The subject condition therefore applies in Gichuka, as in other languages.

Wh-island Constraint
This constraint states that it is impossible to move out of a clause with another *wh*-phrase. A clause with another *wh*-phrase is an island for subsequent extraction of another ˆwh-phrase. Consider the declarative sentence in (13).

 (13) John arugire nkima
       John cooked ugali.
       'John cooked ugali'

The subject of the sentence John can be questioned using full *wh*-movement (14a) and intermediate strategy (14b).

(14)   (a) **Nuu** arugire nkima?
             f-who cook food
             'Who cooked ugali?'(full *wh* movement)

        (b) Nkima **nuu** arugire
            food f-who cooked
            'Who cooked food?' (intermediate *wh* movement)

Note however, after questioning the subject, the object cannot be questioned too, because the sentence with the subject is an island (15).

*(15) Nimbi **nuu** arugire?
        What f- who cooked?
        'What did who cooked'

The sentence is ungrammatical even when the order of the *wh*-phrases is switched, (16).
 (16)   **Nuu** nimbi arugire?
        Who what cooked

The *wh*-island constraint therefore holds for Gichuka.

Co-ordinate Structure Constraint
This constraint states that movement out of coordination is impossible.
It is impossible to question one object in a structure where we have two of them.
(17) (a) What did John cook?
       *(b) What did John cook ugali and__?
       *(c)What did John cook __and rice?

This constraint applies Gichuka. Consider the declarative sentence in (18a) with a conjunct. One cannot question/extract one of the conjuncts leaving the other (18b) and (18c) by use of full *wh*-movement.

 (18)   (a)John arugire nkima na mucere
             John cook   ugali and rice
             'John cooked Ugali and rice.'

      *(b) **Ni-mbi**John arugire nkima na__
             f-what John cooked ugali and
             'What did John cook Ugali and?'
       *(c) **Nimbi** John arugire na muceere
             What John   cooked and rice
             'What did John cook __ and rice?

The examples are also ungrammatical when the intermediate strategy is used, (19).

(19)*(a) John **nimbi** arugire nkima na__
             John what   cooked ugali and
             'What did John cook Ugali and?'
    *(c) John **nimbi** arugire na muceere
             John f-what   cooked and rice
             'What did John cook __ and rice?

Note however it is ungrammatical to question one of the conjuncts *in situ,* (20).
(20)   (a) John arugire **mbi** na mucere
              John cooked what and   rice
              'What did John cook and rice?'

        (b) John arugire nkima na   **mbi**
              John cooked Ugali and what
              'What did John cook Ugali and?'

Note that extraction of the whole conjunct from the sentence in (18a), i.e 'ugali' and 'rice' is acceptable, (20).

(20)   (a) **Ni-mbi** John arugire   (Full *wh*-movement)
              What John cook
              'What did John cook?'
        (b) John **ni-mbi**arugire   (Intermediate strategy)
              John f-what cook
              'What did John cook?'

The coordinate structure constraint therefore applies in Gichuka.

CONCLUSION

This paper which has been mainly descriptive in nature has shown that *wh*-movement in Gichuka conforms to the constraints established elsewhere – the *wh*-island constraint, the subject condition and the coordinate structure constraint. The study established however that wh-movement is not constrained by the complex NP constraint of the type *make the claim*. The study also established a mismatch in the amelioration of islands – while coordinate structure islands can be ameliorated by *wh- in situ*, subject islands cannot. I will leave an exploration for this mismatch for future research.

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