WH-QUESTIONS IN KITHARAKA

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ABSTRACT.

This study looks at strategies of question-formation in Kitharaka, an SVO Bantu language spoken in Kenya. Kitharaka wh-questions are formed by use of four main strategies: wh-*ex situ*, wh-*in situ*, partial wh-movement and the intermediate strategy. My main claim in this research which is based on the theory developed by Sabel (2000) is that the placement of wh-phrases in Kitharaka can be uniformly accounted for if it is assumed that Kitharaka has two focus feature specifications in the lexicon: a strong and a weak focus feature. The selection of the weak focus feature leads to wh-*in situ*, while the selection of the strong focus feature results in the other three strategies (wh-*ex situ*, partial wh-movement and the intermediate strategy), as the wh-phrases are forced to move to the specifier position of the head carrying the strong focus feature to create the canonical Spec head relation required for feature checking (cf. Chomsky, 1995). A fortunate consequence of the feature-based approach adopted in this research is that what appears to be movement of wh-phrases to two different landing sites (Spec CP and Spec FocP) in Kitharaka is in principle movement to the same landing site, *Spec FocP*. A feature-based approach to wh-questions in Kitharaka should also be seen to argue against the claim that wh-questions in all Bantu languages are formed by the use of clefts (see Bergvall 1987, Harford 1997). In simple terms, this research seeks to show that wh-movement in Kitharaka is really an instance of focus movement.

DECLARATION.

I declare that this research is my own unaided work. It is submitted for the degree of

Master of Arts at the University of the Witwatersrand, Johannesburg. It has not been

submitted before for any other degree or examination at any other university.

Peter Kinyua Muriungi

_16th_ day of _January_ 2003.

For Karimi and her two husbands,

Munene and Muriungi.

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CHAPTER 1:   INTRODUCTION

1.1   Question formation in English vs Kitharaka

In English, wh-questions are formed by moving wh-phrases to the initial position of the matrix clause. This condition holds for both short wh-questions as in (1a) and long wh-questions, (1b), where the wh-phrase is moved out of an embedded clause.

(1)   a. **Who** did John beat t?

      b. **Who** do you think that John beat t?   (wh-*ex situ*)

Wh-movement to clause-initial position is the only way of forming questions in English. It is impossible to leave a wh-phrase *in situ* as in (2), except in multiple and echo questions. It is also not possible for the wh-phrase to move from an embedded clause to the initial position of an embedded sentence (a process called partial wh-movement), (3). Furthermore, it is impossible to move a wh-phrase to an intermediate position between the subject and the verb, (4):

(2)   a. * John beat **who**?

      b. * You think John beat **who**?   (wh-*in situ*)

(3)   a. * You think **who** John beat t?

      b. * **What** do you think **who** John beat t?   (partial wh-movement)

(4)   a. *John **who** beat t?

      b. * You think Mary **who** said John beat t?   (intermediate strategy)

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In striking contrast to English, Kitharaka allows all the four question formation strategies mentioned above.

(5)   a. **N-uu**   John   a-ring-ir-e t?[1]

        F-who   John   SP-beat-T-FV

        'Who did John beat?'

      b. **N-uu**   u-ku-thugania   John   n-a-ring-ir-e t?

        F-who   2nd SG-T-think   John   F-SP-beat-T-FV

        'Who do you think that John beat?'   (wh-*ex situ*)

(6)   a. John   a-ring-ir-e   **(g)uu?**[2]

        John   SP-beat-T-FV   who

        'Who did John beat?'

      b. U-ri-thugania   ati   John a-ring-ir-e   **(g)uu?**

        2nd SG-T-think   that   John SP-beat-T-FV   who

        'Who do you think that John beat?'   (wh-*in situ*)

(7)   U-ri-thugania   **n-uu**   John   a-ring-ir-e t?

        2nd SG-T-think   F-who   John   SP-beat-T-FV

        'Who do you think John beat?'   (partial wh-movement)

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[1] The following abbreviations will be used in this research:

F	focus particle/marker	T	tense/aspect marker
2nd SG	second person singular	1st SG	first person singular
PASS	passive	PF	perfective
VS	verb stem	DEM	demonstrative
FV	final vowel	COP	copula
SP	subject prefix	RC	relative concord
ST	stative		

A number before an NP shows the class to which that noun belongs.

[2] The *g* attached to the wh-phrase in (6) does not have any semantic value. In fact some speakers do not use it in speech. It is just a consonant inserted to create phonetic distinction between the wh-phrase and the preceding verb, which ends in a vowel.

(8)   a. John **n-uu**   a-ring-ir-e t?

           John F-who   SP-beat-T-FV

           'Who did John beat?'

     b. U-ri-thugania   ati   Mary **n-uu**   a-ug-ir-e   John   n-a-ring-ire t?

        2nd SG-T-think that Mary F-who SP-say-T-FV John   F-SP-beat-T-FV

        'Who do you think that Mary said John beat?'   (intermediate strategy)

My aim in this research is therefore to:

> ➤ Provide a detailed description and discussion of the four wh-question formation
>   strategies in Kitharaka.

> ➤ Offer an analysis of wh-*ex situ*, wh-*in situ* and partial wh-movement in Kitharaka,
>   which is based on the ideas articulated in Sabel (2000).

> ➤ Suggest a new analysis for the intermediate strategy (cf. example (8)), which is
>   partly based on the split C-system of Rizzi (1997).

> ➤ Show that all wh-phrases in Kitharaka move to a uniform landing site.

1.2   Kitharaka speakers

Kitharaka is an SVO Bantu language, which is spoken by one of the groups of the Central

Bantu of Kenya. It is spoken in Tharaka District, which is located in the Eastern Province

of Kenya.

The Tharaka boarder the Akamba to the East, to the north the Tigania, to the south the

Mbeere and west the Imenti. All these neighbours are also classified in the Central Bantu

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cluster of Kenya. The Tigania and Imenti are subsumed under the larger Meru family. The degree of mutual intelligibility between Kitharaka and these two languages (Gitigania and Kiimenti) is higher compared to Kikamba. Other languages, which belong to the Central Bantu group but whose speakers do not boarder Tharaka are Kiembu and Kikuyu.

Kitharaka exhibits the properties typical of other Bantu languages. For example, the subject NP agrees with the verb, and this is marked overtly by a subject prefix (also called a subject concord) attached to the verb. Different noun classes use different prefixes. This agreement system also spills over to the domain of wh-phrases because if a DP is made up of a wh-determiner and an NP, the wh-phrase must agree with the head noun as is shown in (9):

(9)　　a. Muntu　　u-riku
　　　　　1person　SP-which
　　　　　'which person'

　　　　b. Nyamu　　i-riku
　　　　　9animal　SP-which
　　　　　'which animal'

　　　　c. Kamuuro　　　　ka-riku
　　　　　12river (small)　SP-which
　　　　　'which (small) river'

We observe in (9a-c) above that the prefix attached to the wh-phrase *riku* 'which' in Kitharaka comes in various forms depending on the complement (NP) which it takes.

1.3   The search for language universals

Current investigations in linguistic theory are aimed at discovering language universals, that is, those characteristics that are common to all languages. This research undertaking cannot be successful if conclusions are based solely on a few well-researched languages. The study of under-researched languages like Kitharaka can provide useful insights and new data that can strengthen or refute existing universal claims relating to wh-questions. This study is therefore important, from a descriptive point of view, because it introduces data from Kitharaka, an under-researched language. The analysis of the data also has some theoretical ramifications for the syntax of wh-questions particularly in Bantu languages.

1.4   The principles and parameters theory

I operate within the general framework of the principles and parameters theory (Chomsky 1986a; 1993; 1995) in this study. According to Chomsky (1995: 129), "A language is not … a system of rules, but a set of specifications for parameters in an invariant system of principles of Universal Grammar (UG)". This means that there are no rules or construction-specific principles for a particular language. What exists are general principles which include parameters to accommodate variation amongst different languages. For example, it is a general principle of X-bar theory (see (10 & 11) below) that all phrases have heads, but whether these heads occur phrase-finally or initially is a parameter that children need to set in the course of language acquisition. To form a prepositional phrase in English, the head of the phrase, the preposition, occurs initially

and precedes the noun phrase as in *in the granary*. In contrast, the preposition *ni* follows

the noun in Kitharaka as in *ikumbi-ni*, literally translated into 'granary in.'

The structures of all languages are characterized by the principles of X-bar theory. It is

this theory which specifies what constitutes a possible phrase in all natural languages.

(10) XP

ZP   X'

X°   YP

(11) VP

VP   AP

V°   NP   nicely
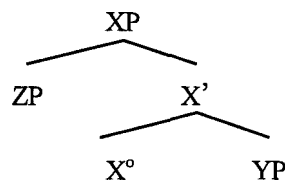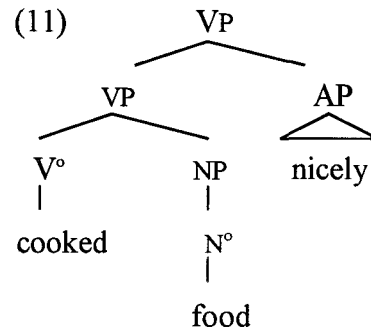
cooked   N°

food

All phrases fit in the structural blueprint specified by X-bar theory (see (10)). According

to this blueprint, all phrases must have a head ($X°$ in (10)). In (11), the verb *cooked* is the

head of the verb phrase *cooked food nicely*. The verb phrase *cooked food nicely* is called

a maximal projection of the head *cooked* and it corresponds to XP in (10). This head

takes as its complement the noun phrase *food*. The head *cooked* and its NP-complement

food, which corresponds to YP in (10), are sisters. This is because they are dominated by

the same mother node, the lower VP. The adverb *nicely* which modifies the verb phrase

appears as an adjunct.

Functional categories such as determiners can also project phrasal categories. In the

phrase *John's car*, (see 12 below), the possessive marker *'s* is the head. This head takes

as its complement the noun phrase *car*. The DP *John* is the specifier of the head *'s* and it corresponds to ZP in (10). If we passivise the DP *John's car*, we get *the car of John*. The DP *the car* then moves to the specifier position that was originally occupied by *John*. Specifier positions are therefore possible landing sites for movement.

(12)

```
                        DP
                     ┌──────┐
                  DP          D'
                ┌────┐      ┌────┐
               John     D°      NP
                        │        │
                        's       N°
                                 │
                                car
```
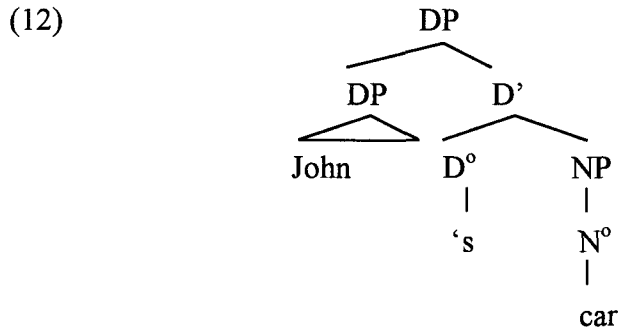
I° (for inflection) and C° (for complementiser) are also functional heads. The I° head carries agreement and tense features. The C° position is associated with complementisers such as *that, if* and *for*. The two functional heads I° and C° can also project specifier positions (Spec IP and Spec CP respectively (cf. (13)). Spec IP is generally assumed to be the landing site for moved NPs (due to unaccusativity processes) and Spec CP is associated with the landing site of moved wh-phrases.

(13)

```
                     CP
                  ┌──────┐
          Spec CP         C'
          Who_i        ┌──────┐
                    C°        IP
                    did_j   ┌──────┐
                        Spec IP      I'
                         ┌──┐      ┌──────┐
                        John   t_j        VP
                                        ┌──────┐
                                     V°          DP
                                     │           │
                                    beat         t_i
```
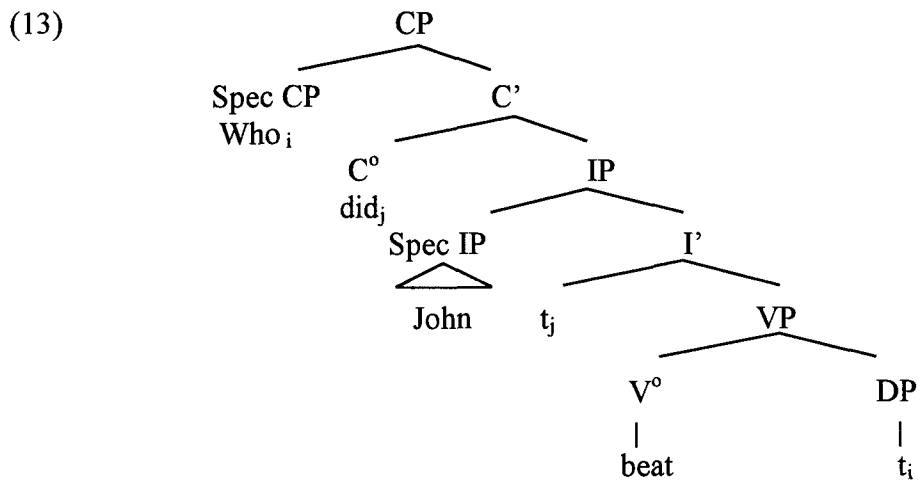
In a simple wh-question like (1a), represented structurally as (13), the wh-phrase originates as a deep structure direct object but undergoes movement to Spec CP. X-bar theory thus allows constituents generated in one position to be realised in another position as a result of movement. It is important to note that phrases like DPs (determiner phrases) and wh-pronouns only move to specifier positions (Spec IP and Spec CP), and heads like I^o only move to head positions. In example (13), the wh-pronoun moves from the object position to Spec CP, satisfying the rule that phrases should only move to specifier positions. The auxiliary verb *did* moves from I^o to C^o, from a head position to another head position, again satisfying the condition that heads should only move to head positions.

The specific claims made in the most recent form of the principles and parameters theory, the Minimalist Program (henceforth MP) are central to my discussion in this research. The MP recognizes two cardinal syntactic levels: the phonetic form (PF) and the logical form (LF). The PF representation of a sentence tells us how it is pronounced and the LF representation describes linguistic aspects of its meaning (Radford 1997).

A fundamental assumption in the MP is that every movement of linguistic expressions is triggered by the need to check some feature. The features that are responsible for causing such movement are categorized into two types: [±interpretable] and [± strong]. [–interpretable] features are those that do not make any contribution to the interpretation of a sentence. An example is the agreement feature expressed by the agreement marker -*s* (cf. *like* vs. *likes*). Since these features do not contribute any meaning, they must be

checked and eliminated before the level of LF failure to which the derivation will crash (cf. Chomsky 1995). [+interpretable] features are those that contribute to the semantics of a sentence, like the plurals of nominals. These features will need to be checked by overt movement only when they are strong. Following Sabel (2000) and Chomsky (1993; 1995), I assume that the features associated with wh-movement are [+interpretable]. Wh-movement as in (13) is therefore taken to be a consequence of a strong feature located in C^o. In the absence of overt wh-movement, it must be the case that the feature in C^o or some other functional head is [-strong]. It is this parameterisation in feature strength that leads to variation within a single language and amongst different languages with respect to the placement of wh-phrases (see Chapter 3 for details).

1.5   Approaches to wh-constructions in the literature

The topic of wh-questions is perhaps one of the most researched and controversial areas in syntax. Early studies show that wh-questions are formed by application of transformational rules (Chomsky 1957; Katz and Postal 1964; Grunder and Suzzette 1973; Stockwell 1977). Stockwell (1977) captures the close relation between the wh-phrase and the auxiliary through a rule he calls **wh-aux-attraction.** He shows that when the wh-phrase undergoes transformation from its deep-structure position to the sentence initial position in English, it tends to attract the auxiliary to its immediately following right position, in a manner reminiscent of verb second. This observation is important because as it will become clear in this study, it is this kind of relation between the wh-phrase (in Spec CP position) and the auxiliary (in C^o position) that is recognized in modern syntactic theory as the canonical configuration necessary for feature checking

and discharge. Note that Spec IP and the I° head position have a similar configuration (cf. 13).

The analyses proposed in Chomsky (1967), Baker (1970), Bresnan (1970) and Bach (1971), among others, could be regarded as early attempts to discover language universals. These studies argue that in those languages that allow wh-movement, this movement always displaces wh-phrases to the left. This is indeed true for languages like English and Kitharaka. However, Bokamba (1976) shows that this conjecture is not universally true by demonstrating that there are Bantu languages like Dzamba, Likila and Lingala, which involve rightward displacement of the wh-phrase. Although these three languages belong to the same family (Bantu) as Kitharaka, it is clear that they have a different structure. Therefore, the analysis developed in Bokamba (1976) cannot provide an integrated explanation to the varied question formation strategies in Kitharaka.

Bresnan (1970) proposes that wh-phrases should be analyzed on a par with other complementisers such as *that* and *for*. While this approach links wh-phrases to the C-system, it leads to problems because it classifies words with phrasal status (wh-words like *who*) in the same category as words with head status (complementisers such as *that* and *for*).

The conclusion to be drawn from these early studies is that wh-questions are formed through movement of some constituents, rightward or leftward. What is not explained however is what the trigger for this movement is.

There are certain restrictions on movement. A linguistic expression (e.g. a wh-phrase) cannot be moved too far from the position where it originates. This is captured through the Bounding Theory which capitalizes on the subjacency principle (see Chomsky 1977). The subjacency principle states that a moved constituent cannot cross more than one bounding node, where the bounding nodes are S (= IP) and NP (=DP).

(14)   * What did Palesa make [NP the claim [CP that [IP she read t in Sabel's article]]]?

In (14), movement of the wh-phrase from the CP embedded in the NP crosses the two bounding nodes, IP and NP and this is what leads to ungrammaticality. The NP in (14) is therefore an island for extraction, and has been dubbed the complex NP constraint by Ross (1967).

In apparent violation of this principle, we find wh-phrases moving from embedded sentences up to the matrix sentence as in (15). A subjacency effect is expected because the wh-phrase moves over quite some long distance; in fact it crosses three clauses. The explanation offered to account for the lack of subjacency effects in cases such as (15) is that long wh-movement occurs in a succession of short steps, from Spec CP to Spec CP, (cf. Chomsky 1977; Sells 1985; Lasnik and Saito 1992; Culicover 1997; Sabel 2000).

(15)   Who do you think   t''   Suren said   t' Adhanom beat t?

The wh-phrase *who* moves from t through t' and t'' up to the final landing site in the matrix Spec CP. Each individual step does not violate the subjecency principle as the wh-

phrase moves over a short distance, crossing only one bounding node (IP) at a time, and since a subjacency violation is not created by an IP node but by successive movement through NP and IP nodes (see 14), then the derivation in (15) converges.

The claim that a wh-phrase moves cyclically gets support from the observation that a wh-phrase cannot be moved across a filled Spec CP position, (16):

(16)   * Who$_i$ do you wonder what$_j$ t$_i$ bought t$_j$?

(16) is ungrammatical because movement of the wh-phrase *what* to the intermediate Spec CP, blocks cyclic movement of the other wh-phrase *who*. The wh-phrase *who* is therefore forced to move from its base position in the embedded sentence to the matrix Spec CP in one swoop, an illicit derivation under the subjacency principle. Traditionally the ungrammaticality of (16) was assumed under the wh-island constraint; movement of the first wh-phrase *what* to the intermediate Spec CP makes this CP-clause an island for subsequent extraction of the second wh-phrase *who*. More examples on NP and wh-islands are offered in Chapter 2.

With the representation of the sentence as a CP (Chomsky 1986b) as in (13), the landing site of wh-phrases was postulated to be Spec CP. Furthermore, it was hypothesised, as already stated, that movement to Spec CP is a consequence of attraction by a strong feature in C^o.

Rizzi (1991, 1996) and Lasnik and Saito (1992) argue that there is a wh-feature in C^o that is responsible for attracting wh-phrases to clause-initial position. They claim that this feature exists in all languages and must be checked via movement of the wh-phrase to Spec CP. Languages that allow wh-phrases to remain *in situ* raise an obvious problem for this approach. How do these phrases check the feature in C^o ? A popular solution, first proposed by Huang (1982), is based on the idea of LF movement. LF is an abstract syntactic level which is the interface to the conceptual-intentional system and which is directly interpreted by the semantics of a language (Chomsky 1995). It is at this level that *in situ* wh-phrases move to check the strong wh-feature in C^o (see also May 1985 for details).

Simpson (2000) also observes that wh-movement is solely motivated by wh-features. He makes the additional claim that wh-features are features of (are found in) all wh-phrases and therefore they need to be licensed/checked on individual wh-phrases, whether they are moved or they are in the *in situ* position.

Consider the English multiple and yes/no questions and the sentence containing a focalized NP in (17):[3]

(17)   a. Who$_j$ t$_j$ bought what?
       b. Is Victor going to the market?
       c. THAT BOOK I never read.

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[3] Only (17c) is quoted in Simpson (2000).

Simpson argues that in situations of multiple wh-questions such as (17a), movement of the first wh-phrase (who) serves to disambiguate the C^o head. He argues that C^o needs to be disambiguated because it can also represent pure focus as shown in (17c), and yes/no questions as in (17b). Once the C^o head is disambiguated, it is able to license/check the features of the other wh-phrase (what) in its *in situ* position. Simpson's argument becomes even more convincing when we consider his explanation for the ungrammaticality of (18):

(18)   * Who$_i$ t$_i$ thinks what$_j$ Mary bought t$_j$?   (Simpson 2000: 119)

Simpson argues that in (18), C^o has been disambiguated (triggered as +wh) by movement of the first wh-phrase *who*. Movement of the second wh-phrase *what* is therefore not motivated by any licensing demands and that is why the sentence is ungrammatical.

Because of his disambiguation approach to wh-questions, Simpson claims that there is actually no need for wh-phrases to move at LF, as a disambiguated C^o can license or check the features of wh-phrases in their *in situ* position. A major problem for his analysis arises in languages that have only one wh-phrase in the *in situ* position (Kitharaka (6)), and other languages, which allow all wh-phrases to remain *in situ* (Mandarin Chinese). How then is the C^o head disambiguated so that it can license the wh-phrases in their *in situ* position if no movement at LF is possible? For Mandarin Chinese, Simpson argues that the C^o head is not ambiguous. The particle *ma* represents yes/no questions on the one hand and the other particle *ne* represents purely wh-questions. So the wh-phrases are licensed automatically in their *in situ* position (see (19)):

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(19)   a. ni xi-ang-zhidao [shei mai-le   shenne] **ne**?

  you wonder   who buy-T   what   Q

  'Who is the person x such that you wonder what x bought?'

  'What is the y such that you wonder who bought y?'   (Simpson 2000: 125)

  b. ta   xihuan   shemme **ma**?

  he like   what   Q

  'Does he like something (anything)?   (Simpson 2000: 89)

With languages such as Kitharaka, Simpson would argue that there is a null (covert) question particle similar to the ones of Chinese. It is this covert particle which triggers C° as +wh. A C° head with a +wh specification is then able to license the wh-phrases in the *in situ* position. This is similar to the argument he advances for the licensing of the wh-phrase in English echo questions such as the one in (20):

(20)   So having arrived there, you did **what** exactly?   (Simpson 2000: 116)

Simpson assumes that the features of the wh-phrase *what* in (20) are checked (licensed) by a null particle in C which is marked as +wh.

While Simpson's approach, as well as that of Rizzi (1991; 1996), and Lasnik and Saito (1992) go a step further and identify what triggers wh-movement, they cannot provide an adequate explanation for Kitharaka wh-questions, as they do not address the contribution of focus features to wh-movement. Simpson's theory can explain wh-questions in all human languages, because whenever we do not have something overt to disambiguate the C° head, the claim is made that there is something covert that does it. He does not make a bold claim as to what the general properties of wh-phrases in human language should be.

It is difficult to tell what his predictions are and therefore his theory cannot be tested or falsified. His theory is therefore not scientific and it is difficult to use it in this research (see Popper 1972 for a distinction between a scientific and a non-scientific theory).

The analysis proposed in Boskovics (1999) recognizes that wh-movement can be motivated by demands quite different from the task of checking wh-features. He makes the observation that in languages such as Bulgarian (21) and Serbo-Croatian (22), all wh-phrases are moved to some leftward position. He makes the additional observation that while wh-phrases in Bulgarian are subject to the superiority condition,[4] (21b), wh-phrases in Serbo-Croatian are not (22b).

(21)   a. Koj   kogo   e   vidjal?
          who   whom is   seen
          'Who saw whom?'

       b. *Kogo   koj   e   vidjal?

(22)   a. Ko je   koga vidio?
          Who is   whom seen
          'Who saw whom?'

       b. Koga   je   ko   vidio?   (Boskovics 1999: 163)

Why do we get this asymmetry between these two related languages? Boskovics argues that in Bulgarian (21), the feature causing movement is a strong wh-feature located in the

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[4] The central intuition behind superiority is that a wh-phrase cannot be moved across another wh-phrase which is hierachically higher than it. Culicover (1997:304) states that α is superior to β if every maximal projection dominating α dominates β but not conversely.

functional head (C°). The wh-phrases have a weak variant of this feature. This feature must be checked in the most economical way, and this is only possible through movement of the first wh-phrase *koj* 'who' as in (22a). Movement of the second wh-phrase *kogo*, 'whom', will therefore lead to ungrammaticality because of a violation of principles of economy. In Serbo-Croatian, the feature responsible for movement is a strong focus feature located in **the wh-phrases**, the elements undergoing movement. As the strong focus feature is in all wh-phrases, the order in which they move does not matter as in either way, the same amount of nodes will be crossed. Although this research does not address the issue of superiority, Boskovics analysis makes two interesting points which have been ignored by others. First, wh-movement can be triggered by wh- and focus features and secondly, strong features responsible for movement can be found in functional heads (Bulgarian), or in the wh-phrases themselves (Serbo-Croatian).

The theory proposed by Sabel (2000) begins with the simple and direct observation that wh-movement is not only triggered by the need to check wh-features, but is also motivated by the need to check focus features. It is this theory that captures, in a uniform way, properties of wh-questions in Kitharaka and therefore it is at the heart of discussion in this research.

1.6 Organization of the research

This research is organized as follows. In Chapter 2, I look at properties of wh-questions in Kitharaka. I will present data on wh-*ex situ*, wh-*in situ*, partial wh-movement and the intermediate strategy. I will then investigate the extent to which these four strategies are

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available for objects, subjects and adjuncts both within simple and complex sentences. Finally, I will give some constraints on wh-movement in Kitharaka.

In Chapter 3, I will show that the trigger for wh-movement in Kitharaka is a morpho-syntactic focus feature. It is in this chapter that I will discuss Sabel's theory of wh-movement. I will then apply Sabel's analysis to Kitharaka and show that his theory captures most properties of wh-questions in Kitharaka.

Chapter 4 looks at the intermediate strategy, a question formation style where the wh-phrase is found between the subject and the verb. I will show in this chapter that the wh-phrase in the intermediate strategy does not move to a position between IP and VP as it superficially appears; rather, I will give empirical evidence for the claim that the wh-phrase in the intermediate strategy moves to Spec focus phrase (Spec FocP) located above IP and the logical subject undergoes topicalisation to a slightly higher Spec topic phrase (Spec TopP) position. This chapter will also be the basis for my claim that wh-phrases in Kitharaka move to a uniform landing site.

CHAPTER 2: WH-QUESTION FORMATION IN KITHARAKA

Wh-questions in Kitharaka are formed by use of four main strategies. First, the wh-phrase can be moved to Spec CP of the matrix sentence, (1). This is the sense in which I use the term wh-*ex situ* in this research. Secondly, the wh-phrase can be left in its base position (wh-*in situ*) as shown in (2). Thirdly, if the wh-phrase originates in an embedded sentence, it can be moved from its base position to Spec CP position of the same embedded sentence or to the Spec CP of another embedded sentence, a process called partial wh-movement, (3). Finally, the wh-phrase can be moved to a position between the subject and the verb (4), a question formation style which will be the subject of a detailed discussion in Chapter 4 and which I call the intermediate strategy.

(1) [$_{CP}$ **Wh**   V   t]?   (wh-*ex situ*)

(2) [$_{IP}$ Sub   V   **wh**]?   (wh-*in situ*)

(3) [$_{IP}$ Sub   V [$_{CP}$ **wh** [$_{IP}$ Sub   V   t]]?   (partial wh-movement)

(4) [$_{IP}$ Sub   **wh** V   t]?   (intermediate strategy)

In this chapter, I investigate these four strategies within simple and complex sentences. I also attempt to show the extent to which these question-formation styles are available for subjects, objects and adjuncts, and whether there are asymmetries and differences in terms of their placement. Finally, I identify some major research questions, some of which will be addressed in this research and some which will be pointed out as potential topics for future research.

2.1   Wh-questions in simple sentences

In this section I look at wh-question formation in mono-clausal sentences.

2.1.1   Wh-*ex situ*

In Kitharaka, it is possible to move questioned objects (5a, b), subjects (5c, d) and adjuncts (5e-h) to Spec CP of the matrix sentence.

(5)   a. **I-mbi**   Kathere   a-tem-ir-e t?

      F-what   Kathere   SP-cut-T-FV

      'What did Kathere cut?'

    b. **N-ibuku   ririku**   Nancy   a-gur-ir-e t?[1]

      F-book   which   Nancy SP-buy-T-FV

      'Which book did Nancy buy?'

    c. **N-uu**   t   a-ring-ir-e   Samueli?

      F-who   SP-beat-T-FV   Samuel

      'Who beat Samuel?'

    d. **I-muntu uriku**   t   a-ring-ir-e   Samueli?

      F-person which   SP-beat-T-FV   Samuel

      'Which person beat Samuel?'

---

[1] When a d-linked wh-phrase is fronted, (5b, d), the focus particle appears on the NP and not on the wh-phrase. A wh-phrase is d-linked when both the speaker and hearer know and have in mind a small, specific set of alternatives from which the answer to the question can be drawn. In contrast, the focus particle appears on the wh-phrase if the questioned part consists of a simple wh-phrase. In the following sections, I will provide examples with simple wh-phrases as complex wh-phrases do not affect in any way the analysis I am developing in this research.

e. **N-ata** u- ri t?

　F-how 2nd SG-are

　'How are you?'

f. **I-mbi nontu** Vincent a-ring-ir-e Victor t?

　F-why Vincent SP-beat-T-FV Victor

　'Why did Vincent beat Victor t?

g. **I-ku** Victor a-thi-ir-e t?

　F-where Victor SP-go-T-FV

　'Where did Victor go?'

h. **I-ri** Victor a-thi-ir-e t?

　F-when Victor SP-go-T-FV

　'When did Victor go?'

All the three categories of wh-phrases (objects, subjects and adjuncts) are therefore accommodated in the wh-*ex situ* strategy in short wh-question contexts. Note that all the fronted wh-phrases bear the prefixes *n-* if they start with a vowel and *i-* if they start with a consonant. As mentioned in the introduction, the term **focus marker/particle** will be used for these two prefixes[2] (see Chapter 3 for details).

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[2] The term focus particle has also been used by Clements (1984) for a cognate morpheme in Kikuyu. Bergvall (1987) calls it an assertive marker, and Harford (1997) dubs it predicative. I will adopt the terms focus marker/particle as they are the ones used in the theory that I will use in Chapter 3.

2.1.2 Wh-*in situ*

The picture changes somewhat when we look at wh-*in situ*. While it is possible to have an *in situ* wh-object in Kitharaka, (6a), such a construction is unacceptable for wh-subjects, (6b):

(6)   a. Kathere a-ring- ir-e   **(g)uu?**

          Kathere SP-beat-T-FV who

          'Who did Kathere beat?'

    b. * **Uu**   a-ring-ir-e   Samueli?

        who SP-beat-T-FV Samuel

        'Who beat Samuel?'

Similar subject-object asymmetries in question formation are observed to occur in the Nguni languages (cf. Zeller and Sabel 2002). While it is possible to have an object wh-phrase *in situ* and *ex situ* in these languages (7a, b), the corresponding *in situ* construction is not possible with subject wh-phrases (8a). What is allowed is a cleft construction (8b):

(7)   a. U-bona   **ini** t?

        2nd SG-see what

        'What do you see?'

    b. **Ng-ubani** o-m-bonayo t?

        COP-who   RC-2^{nd}SG-see

        'It is who whom you see?'   (Zulu)

(8) a. * **Ubani** t u-banga   lowo   msindo?

   who   SP-cause DEM   noise

   'Who is making that noise?'

  b. **Ng-ubani** t o-banga   lowo   msindo?

   who   RC-cause   DEM   noise

   'Who is it that is making that noise?'   (Zulu)

              (Zeller and Sabel 2002: 1)

Similar asymmetries have also been noted in Kikuyu where a wh-subject cannot be left *in situ* (see Clements 1984: 42).

Kitharaka wh-adjuncts do not behave uniformly with respect to wh-*in situ*. While the adjuncts *ku*, 'where', and *ri*, 'when', can be left *in situ*, (9), the adjuncts *ata*, 'how', and *mbi nontu*, 'why', cannot, (10):

(9) a. Victor   a-thi-ir-e   **ku**?

   Victor   SP-go-T-FV   where

   'Where did Victor go?'

  b. Victor   a-thi-ir-e   **ri** ?

   Victor   SP-go-T-FV when

   'When did Victor go?'

(10) a. * U-ri   **ata**?[3]

   You-are   how

   'How are you?'

---

[3] The Kitharaka wh-phrase *ata* is ambiguous. It can mean *what* and *how*, depending on the context.

b. * U-ring-ir-e   mwana   **mbi nontu?**
   you-beat-T-FV child   why
   'Why did you beat the child?'

I will refer to those adjuncts that allow wh-*in situ* as **Class A wh-adjuncts** and those that do not accommodate wh-*in situ* as **Class B wh-adjuncts**.

Observe that *in situ* wh-phrases behave differently from *ex situ* ones because they do not bear any focus marker. In fact if the focus marker is added to the wh-phrase in the *in situ* position, the sentence becomes ungrammatical. This presence and absence of focus markers will be relevant for my analysis of wh-questions in Chapter 3.

2.1.3 The intermediate strategy

In the introductory paragraph to this chapter, I pointed out that in the intermediate strategy, a wh-phrase occurs between the subject and the verb. When this strategy is used for questioned objects (11a), the sentence is grammatical. In contrast, movement of Class B wh-adjuncts to this intermediate position produces a sentence with some marginal grammaticality (11b, c):

(11)   a. Lilian   **n-uu**   a-rum-ir-e t?
          Lilian   F-who SP-bite-T-FV
       'Who did Lilian bite?'

       b.? Lilian   **i-mbi nontu**   a-j-ir-e t?
          Lilian   F-why   SP-come-T-FV
       'Why did Lilian come?'

c.? Lilian **n-ata** a-coor-ir-e mbica?

    Lilian F-how SP-draw-T-FV picture

    'How did Lilian draw the picture?'

Again, Class A wh-adjuncts pattern with objects; positioning them in the intermediate position produces grammatical sentences (12a, b):

(12)   a. Lilian **i-ku** a-gur-ir-e mugaate t?

       Lilian F-where SP-buy-T-FV bread

       'Where did Lilian buy a loaf of bread?'

       b. Lilian **i-ri** a-gur-ir-e mugaate t?

       Lilian F-when SP-buy-T-FV bread

       'When did Lilian buy a loaf of bread?'

The observations made in section 2.1 are summarised in the table below:

Table 1:   Wh-questions in simple sentences

	Wh-*ex situ*	Wh-*in situ*	Intermediate strategy
Wh-objects	✔	✔	✔
Wh-subjects	✔	*	Not applicable
Class A wh-adjuncts	✔	✔	✔
Class B wh-adjuncts	✔	*	?

2.2 Wh-questions in complex sentences

In this section, I investigate properties of wh-questions in complex sentences.[4] These questions are examined in light of the four strategies mentioned in the introduction to this chapter: wh-*ex situ*, wh-*in situ*, intermediate strategy and partial wh-movement. The discussion, as in the previous section, revolves around possible placement of wh-adjuncts, wh-subjects and wh-objects. "Long wh-movement" is taken to incorporate wh-movement operations occurring within sentences with (an) embedded clause(s).

2.2.1 Wh-*ex situ*.

Kitharaka allows wh-objects (13a), subjects (13b), Class A wh-adjuncts, (14) and Class B wh-adjuncts, (15) to be moved from an embedded sentence, across (an)other embedded sentence(s) up to the Spec CP of the matrix sentence.[5]

(13) a. **N-uu** u-ku-thugania ati John n-a-ug-ir-e Lucy n-a-ug-ir-e Pat n-a-ring-ir-e t?
      F-who 2ndSG-T-think that John F-SP-say-T Lucy F-SP-say-T Pat F-SP-beat-T
      'Who do you think that John said Lucy said Pat beat?'

      b. **N-uu** u-ku-thugania ati John n-a-ug-ir-e Lucy n-a-ug-ir-e t n-a-ring-ir-e Tomu?
      F-who 2ndSG-T-think that John F-SP-say-T Lucy F-SP-say-T F-SP-beat-T Tom
      'Who do you think that John said Lucy said beat Tom?'

---

[4] I will take a complex sentence to be a combination of the matrix sentence and one or more embedded sentences.

[5] In all the examples on complex wh-questions, the vowel *e* pronounced as [ɛ], which comes after the past tense morpheme *–ir* is still the final vowel (FV). I have not indicated this under the glosses for ease of data organization.

(14) a. **I-ku** u-ku-thugania ati chibu n-a-ug-ir-e borisi n-i-on-ir-e Lawrence t?
F-where 2nd SG-T-think that chief F-SP-say-T   police F-SP-see-T Lawrence
'Where do you think that the chief said the police saw Lawrence?'

b. **I-ri** u-ku-thugania ati chibu n-a-ug-ir-e borisi n-i-thaik-ir-e Lawrence t?
F-when 2nd SG-T-think that chief F-SP-say-T police F-SP-arrest-T Lawrence
'When do you think that the chief said the police arrested Lawrence?'

(15) a. **I-mbi nontu** chibu a-ug-ir-e borisi n-i-thaik-ir-e Lawrence t?
F-why chief SP-say-T police F-SP-arrest-T Lawrence
'Why did the chief say the police arrested Lawrence?'

b. **N-ata** chibu a-ug-ir-e borisi n-i-thaik-ir-e Lawrence t?
F-how chief SP-say-T police F-SP-arrest-T Lawrence
'How did the chief say the police arrested Lawrence?'

It should be noted that wh-adjuncts do not behave uniformly with respect to scope. For example, in (14a), the wh-phrase *iku* 'where' refers only to the place where the police saw Lawrence and not to the place where the chief conveyed the message about the seeing of Lawrence. In (14b) however, the wh-phrase *iri* 'when' can refer to both the time when the chief conveyed the message concerning the arrest of Lawrence and the time when the police arrested Lawrence. An almost similar contrast can be observed in (15). In (15a), the wh-phrase *imbi nontu*, 'why' refers to both the reasons for the chief saying that the police arrested Lawrence (maybe because the chief wants to destroy Lawrence's reputation), as well as the reasons for the police arresting Lawrence (possibly because Lawrence is a thief). In (15b) however, the answer to the question with *nata* 'how' can only refer to the manner in which the police arrested Lawrence (for example

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by use of force) and not the manner in which the chief conveyed the message about the arrest of Lawrence. We find here similarity in behaviour between the adjuncts *iri* (when) and *mbi nontu* (why) on the one hand and *iku* (where) and *nata* (how) on the other. It is not my intention in this research to get into details of the properties that contribute to scopal differences between these two pairs of wh-adjuncts. However, it should be clear that in both (14) and (15), the wh-adjuncts originate from some position in a more deeply embedded sentence.

I conclude this subsection by observing that with wh-*ex situ* in complex sentences, no asymmetries are observed with respect to the various categories of wh-phrases. Wh-objects, wh-subjects, as well as all classes of wh-adjuncts can be moved to the sentence-initial position in the matrix clause. Also observe that with wh-*ex situ* in complex sentences, the focus markers *n-* and *i-* are attached not only to the fronted wh-phrases, but also to the verbs in the embedded sentences (except the verb adjacent to the wh-phrase). I will come back to this in Chapter 3.

2.2.2 Wh-*in situ*

As is the case with simple sentences, Kitharaka allows wh-objects (16) to remain *in situ* in an embedded sentence. In contrast, wh-subjects (17a) and Class B wh-adjuncts (17b, c) are disallowed from occurring in this position.

(16)   U-ri-thugania ati   John a-ug-ir-e Lucy   a-ug-ir-e Pat a-ring-ir-e **uu**?
        2nd SG-T-think that John SP-say-T Lucy SP-say-T Pat SP-beat-T who
        'Who do you think that John said Lucy said Pat beat?'

(17) a. * U-ri-thugania ati John a-ug-ir-e   Lucy a-ug-ir-e   **uu** a-ring-ir-e Tomu?
        2nd SG-T-think that John SP-say-T Lucy SP-say-T   who SP beat-T Tom
        'Who do you think that John said Lucy said beat Tom?'

      b. * U-ri-thugania ati chibu a-ug-ir-e borisi i-thaik-ir-e Lawrence **mbi nontu**?
        2ndSG-T-think that chief SP-say-T police SP-arrest-T Lawrence why
        'Why do you think that the chief said the police arrested Lawrence?'

      c. * U-ri-thugania   ati   chibu   a-ug-ir-e borisi i-thaik-ir-e   Lawrence **ata**?
        2nd SG-T-think that chief   SP-say-T   police SP-arrest-T   Lawrence how
        'How do you think that the chief said the police arrested Lawrence?'

Class A adjuncts again pattern with objects; a sentence in which the adjunct *ku* 'where'
or *ri* 'when' is left *in situ* is grammatical, (18a, b):

(18)   a. U-ri-thugania   ati chibu   a-ug-ire borisi   y-on-ir-e   Lawrence **ku**?
        2nd SG-T-think that chief SP-say-T police   SP-see-T   Lawrence where
        'Where do you think that the chief said the police saw Lawrence?'

      b. U-ri-thugania   ati   chibu a-ug-ir-e borisi   i-thaik-ir-e   Lawrence **ri**?
        2nd SG-T-think that chief SP-say-T police SP-arrest-T Lawrence when
        'When do you think that the chief said the police arrested Lawrence?'

With wh-*in situ* in complex sentences, no focus markers appear attached to the wh-
phrases or the verbs. Recall that these focus markers also do not feature when the wh-
phrase is left *in situ* in simple clauses (see (6a) and (9)).

2.2.3 The intermediate strategy

Other than occurring in simple clauses, the intermediate strategy is also realized in complex sentences (see the discussion in (i-iv)).

(i)   Wh-objects and Class A wh-adjuncts

Wh-objects (19a, b) and Class A wh-adjuncts (20a, b) can undergo long movement to the intermediate position without causing ungrammaticality:

(19)   a. U-ri-thugania   John a-ug-ir-e ati Lucy **n-uu**   a-ug-ir-e   Pat n-a-ring-ir-e t?
2nd SG-T-think John SP-say-T that Lucy F-who SP-say-T Pat F-SP-beat-T
'Who do you think John said that Lucy said Pat beat?'

b. U-ri-thugania ati   John **n-uu** a-ug-ir-e Lucy n-a-ug-ir-e   Pat n-a-ring-ir-e t?
2ndSG-T-think that John F-who SP-say-T Lucy F-SP-say-T Pat F-SP-beat-T
'Who do you think John said Lucy said Pat beat?'

(20)   a. U-ri-thugania   ati   chibu **i-ku**   a-ug-ir-e   borisi n-i-on-ir-e Lawrence t?
2nd SG-T-think that chief F-where SP-say-T   police F-SP-see-T Lawrence
'Where do you think that the chief said the police saw Lawrence?'

b. U-ri-thugania   ati   chibu **i-ri**   a-ug-ir-e   borisi n-i-thaik-ir-e Lawrence t?
2nd SG-T-think that chief   F-when SP-say-T   police F-SP-arrest-T Lawrence
'When do you think that the chief said the police arrested Lawrence?'

It should be added here that wh-objects and Class A wh-adjuncts can be moved to the intermediate position of any embedded sentence without resulting in ungrammaticality. The pattern observed in (14) re-emerges here, that is, the wh-adjunct *iri* (when) in (20b)

refs to the time of conveying the message about the arrest of Lawrence as well as the time when Lawrence was arrested, but the other adjunct *iku* 'where' can only refer to the place where Lawrence was seen by the police.

(ii)   Wh-subjects and Class B wh-adjuncts

In contrast to movement of wh-objects and Class A wh-adjuncts, movement of wh-subjects, (21), and Class B wh-adjuncts, (22), to the intermediate position in embedded sentence contexts produces sentences with reduced grammaticality:

(21)   a. ? U-ri-thugania John a-ug-ir-e ati Lucy **n-uu** a-ug-ir-e t   n-a-ring-ir-e Tomu?
2nd SG-T-think John SP-say-T that Lucy F-who SP-say-T F-SP beat-T Tom
'Who do you think John said that Lucy said beat Tom?'

b. ? U-ri-thugania ati   John **n-uu** a-ug-ir-e Lucy n-a-ug-ir-e t n-a-ring-ir-e Tomu?
2nd SG-T-think that John F-who SP-say-T Lucy SP-say-T F-SP beat-T Tom
'Who do you think that John said Lucy said beat Tom?'

(22)   a. ? John a-ug-ir-e ati Colomba **i-mbi nontu** a-ug-ir-e Ivan n-a-wiir-ir-e kigerio?
John SP-say-T that Colomba F-why   SP-say-T Ivan F-SP-fail-T   exam
'Why did John say that Colomba said Ivan failed the exam?'

d. ? John a-ug-ir-e ati Colomba   **nata**   a-ug-ir-e Susan   n-a-rug-ir-e   nkima t?
John SP-say-T that Colomba F-how SP-say-T Susan   F-SP-cook-T food
'How did John say that Colomba said Susan cooked food?'

Movement of wh-subjects and Class B wh-adjuncts to any intermediate position will always produce a sentence with reduced grammaticality.

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In this section we note, just as in section 2.2.2, that when wh-phrases are moved from their base position in the embedded sentence, the focus particle appears on these wh-phrases and in the initial position of all the verbs except in the verb adjacent to the wh-phrase. As the next section will show, this observation also holds for the partial wh-movement.

2.2.4 Partial wh-movement

Partial wh-movement refers to movement of a wh-phrase to the initial Spec CP position of an *embedded* sentence.[6] This kind of movement is possible for questioned objects, subjects and adjuncts in Kitharaka.

(i) Objects

Wh-objects can be moved to Spec CP of the sentence in which they originate (23a) or to the Spec CP positions of other embedded sentences (23b, c) without causing any markedness.[7]

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[6] Clements (1984: 47) uses the term *wandering* questions for partial wh-movement in Kikuyu.

[7] When an overt complementiser *ati*, 'that' co-occurs with a wh-phrase in the same clause, the wh-phrase occupies a position to its right, (i):

(i)   U-ri-thugania   John a-ug-ir-e Lucy a-ug-ir-e   ati **n-uu**   Pat a-ring-ir-e t?

       2nd SG-T-think John SP-say-T Lucy SP-say-T   that F-who Pat SP-beat-T

       'Who do you think John said Lucy said that Pat beat?'

This creates a problem for the assumption that a wh-phrase moves to Spec CP in partial wh-movement. For the time being, it could be assumed that Kitharaka employs the doubly filled COMP filter so that in the absence of an overt complementiser, the wh-phrase moves to Spec CP. This problem will be revisited after discussion of the intermediate strategy in Chapter 4.

(23)   a. U-ri-thugania   John a-ug-ir-e Lucy a-ug-ir-e   **n-uu** Pat a-ring-ir-e t?
　　　　2nd SG-T-think John SP-say-T Lucy SP-say-T   F-who Pat SP-beat-T
　　　　'Who do you think John said Lucy said that Pat beat?'

　　　b. U-ri-thugania John a-ug-ir-e   **n-uu**   Lucy a-ug-ir-e Pat n-a-ring-ir-e t?
　　　　2nd SG-T-think John SP-say-T   F-who Lucy SP-say-T Pat F-SP-beat-T
　　　　'Who do you think that John said that Lucy said that Pat beat?'

　　　c. U-ri-thugania **n-uu**   John a-ug-ir-e Lucy n-a-ug-ir-e Pat n-a-ring-ir-e t?
　　　　2nd SG-T-think F-who John SP-say-T   Lucy F-SP-say-T Pat F-SP-beat-T
　　　　'Who do you think that John said that Lucy said that Pat beat?'

(ii)   Subjects

Wh-subjects can also undergo partial wh-movement as is shown in (24). However, note that the further embedded the wh-phrase occurs, the less acceptable the sentence becomes, (24b, c).

(24)   a. U-ri-thugania   **n-uu** John a-ug-ir-e Lucy n-a-ug-ir-e t n-a-ring-ir-e Tomu?
　　　　2nd SG-T-think   F-who John SP-say-T Lucy F-SP-say-T F-SP-beat –T Tom
　　　　'Who do you that think John said Lucy said beat Tom?'

　　　b. ?U-ri-thugania John a-ug-ir-e **n-uu** Lucy a-ug-ir-e t n-a-ring-ir-e Tomu?
　　　　2nd SG-T-think John SP-say-T F-who Lucy SP-say-T F-SP-beat–T Tom
　　　　'Who do you think John said that Lucy said beat Tom?'

　　　c. ??U-ri-thugania John a-ug-ir-e Lucy a-ug-ir-e **n-uu**   t a-ring-ir-e Tomu?
　　　　2nd SG-T-think John SP-say-T Lucy SP-say-T F-who   SP-beat–T Tom
　　　　'Who do you think John said Lucy said that beat Tom?'

(iii)   Class B wh-adjuncts

The wh-adjunct *imbi nontu*, 'why' can occur in Spec CP of a lower embedded sentence as well as in Spec CP of a higher embedded sentence, (25a, b). The wh-adjunct *nata* 'how', however behaves in a slightly different manner from *imbi nontu* because only a sentence in which it occurs in the initial position of the embedded sentence in which it originates is grammatical (cf. 25c vs. d):

(25)   a. U-ri-thugania   John a-ug-ir-e   **i-mbi   nontu**   borisi   i-thaik-ir-e   Lawrence t?
           2nd SG-T-think John SP-say-T F-why   police SP-arrest-T Lawrence
           'Why do you think John said that the police arrested Lawrence?'

       b. U-ri-thugania   **i-mbi nontu**   John a-ug-ir-e borisi   n-i-thaik-ir-e Lawrence t?
           2nd SG-T-think F-why   John SP-say-T police F-SP-arrest-T Lawrence
           'Why do you think that John said the police arrested Lawrence?'

       c. U-ri-thugania   John a-ug-ir-e   **n-ata**   borisi   i-rugur-ir-e   murango t?
           2nd SG-T-think John SP-say-T F-how police SP-open-T   door
           'How do you think John said that the police opened the door?'

       d. *U-ri-thugania   **n-ata**   John a-ug-ir-e   borisi   n-i-rugur-ir-e   murango t?
           2nd SG-T-think F-how John SP-say-T police F-SP-open-T   door
           'How do you think that John said the police opened the door?'

As expected, the question in (25b) could get a response that refers not only to the reason for John saying that Lawrence was arrested, but also what caused the police to arrest him. With (25a), only the reason that made the police to arrest Lawrence is an acceptable

answer otherwise, the adjunct would have been lowered from the second most deeply embedded sentence.

(iv)   Class A wh-adjuncts

Adjuncts belonging to this class behave like wh-objects; they can be moved to the Spec CP positions of all embedded sentences, (26) and (27) without causing ungrammaticality or reduction in grammaticality:

(26)   a. U-ri-thugania   John a-ug-ir-e Lucy a-ug-ir-e **i-ku** Pat on-ir-e   cimba t?
        2nd SG-T-think John SP-say-T Lucy SP-say-T F-where Pat F-see-T lion
        'Where do you think John said Lucy said that Pat saw the lion?'

    b. U-ri-thugania   John a-ug-ir-e **i-ku** Lucy a-ug-ir-e Pat n-on-ir-e cimba t?
        2nd SG-T-think John SP-say-T F-where Lucy SP-say-T Pat F-see-T lion
        'Where do you think John said that Lucy said Pat saw the lion?'

    c. U-ri-thugania   **i-ku**   John a-ug-ir-e Lucy n-a-ug-ir-e Pat n-on-ir-e cimba t?
        2^{nd}SG-T-think   F-where John SP-say-T Lucy F-SP-say-T Pat F-see-T lion
        'Where do you think that John said Lucy said Pat saw the lion?'

(27)   a. U-ri-thugania   John a-ug-ir-e Lucy a-ug-ir-e   **i-ri**   Pat on-ir-e cimba t?
        2nd SG-T-think John SP-say-T Lucy SP-say-T   F-when Pat see-T lion
        'When do you think John said Lucy said that Pat saw the lion?'

    b. U-ri-thugania   John a-ug-ir-e **i-ri**   Lucy a-ug-ir-e Pat n-on-ir-e cimba t?
        2nd SG-T-think John SP-say-T F-when Lucy SP-say-T Pat F-see-T lion
        'When do you think John said that Lucy said Pat saw the lion?'

c. U-ri-thugania **i-ri**   John a-ug-ir-e Lucy n-a-ug-ir-e Pat n-on-ir-e cimba t?

2^{nd}SG-T-think F-when John SP-say-T Lucy F-SP-say-T Pat F-see-T   lion

'When do you think John said that Lucy said Pat saw the lion?'

Once again it should be observed that the wh-adjunct *iku*, 'where' in (26a-c) can only refer to the place where the lion was seen and therefore originates only in the most embedded sentence. In (27b, c) however, the wh-phrase can refer both to the time of seeing the lion and that of making that statement about seeing the lion. This shows that all embedded sentences provide possible base positions for the adjunct *iri*, 'when'. The asymmetry noted in examples (14) and (15) of section 2.2.1 can be explained along similar lines, that is, the embedded sentences in which the Kitharaka adjuncts *iri*, 'when', and *mbi nontu*, 'why', occur are all possible base positions for these adjuncts while the other adjuncts *nata*, 'how', and *iku*, 'where', can only have the most embedded sentence as their base position. It is this difference in possible base positions that determines the nature of the scope that Kitharaka wh-adjuncts take.

We summarise the observations made in section 2.2 in table 2 below.

Table 2: Wh-questions in complex sentences

	Wh-*ex situ*	Wh-*in situ*	Intermediate strategy	Long partial wh-movement	Short partial wh-movement
Wh-objects	✔	✔	✔	✔	✔
Wh-subjects	✔	*	?	✔	??
Class A wh-adjuncts	✔	✔	✔	✔	✔
Class B wh adjunct *imbi nontu* (why)	✔	*	?	✔	✔
Class B wh-adjunct *nata* (how)	✔	*	?	*	✔

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2.3 Islands

I showed in Chapter 1 that an island is a syntactic configuration from which extraction of constituents is impossible. In section 2.2.1 I also showed that all subject, object and adjunct wh-phrases can be moved from an embedded sentence to Spec CP position of the matrix sentence. There are however some embedded environments from which extraction of wh-phrases results in ungrammaticality. In this section I will discuss these environments with respect to wh-questions in Kitharaka.

2.3.1 NP-islands

As shown in section 2.2.1.above, it is possible in Kitharaka, to extract wh-phrases (arguments and all class wh-adjuncts) out of a CP (28a-f):

(28)   a. **I-mbi**   u-ku-thugania [cp Felice n-on-ir-e t nyomba rukiiri]?[8]
          F-what 2nd SG- T-think   Felice F-see-T   house   in the morning
          'What do you think Felice saw in the house in the morning?'

      b. **N-uu**   u-ku-thugania [cp t n-on-ir-e icia   rukiiri]?
          F-who 2nd SG- T-think   F-see-T   dove   in the morning
          'Who do you think saw a dove in the morning?'

      c. **I-ri**   Joanina a-ug-ir-e [cp Paul n-on-ir-e icia nyomba t]?
          F-when Joanina SP-say-T   Paul F-see-T   dove house
          'When did Joanina say Paul saw a dove in the house?'

---

[8] When the verb stem *on* 'see' is used, the subject prefix *a* which is expected in (28a-b) does not surface.

d. **I-ku**   Joanina a-ug-ir-e [cp Paul   n-on-ir-e   icia   t   rukiiri]?

F-where Joanina SP-say-T   Paul F-see-T   dove   morning

'Where did Joanina say Paul saw a dove in the morning?'

e. **I-mbi nontu**   Joanina a-ug-ir-e   [cp Paul n-a-urag-ir-e   icia   t]?

F-why   Joanina SP-say-T   Paul F-SP-kill-T   dove

'Why did Joanina say Paul killed a dove?'

f. **N-ata**   Joanina a-ug-ir-e [cp Paul n-a-urag-ir-e   icia   t]?

F-how Joanina SP-say-T   Paul F-SP-kill-T   dove

'How did Joanina say Paul killed the dove?'

Similar to the discussion in section 2.2.1 and 2.2.4 the sentences with the adjuncts *imbi nontu*, 'why', and *iri*, 'where', are ambiguous as they can refer both to the embedded as well as the matrix sentences. This therefore suggests that both the embedded and the matrix sentence are possible base positions for the two wh-adjuncts. The other wh-adjuncts *nata*, 'how', and *iku*, 'where', only refer to the embedded sentences, an observation that leads us to hypothesise that their base position might only be in the deeply embedded sentence.

In contrast to (28), extraction of wh-words from a CP contained (or embedded) in an NP produces either marginal grammaticality, (29a-d), or total ungrammaticality, (29e-f):

(29). a. ? **I-mbi** chibu a-nenkani-ir-e [np riboti [cp ati   aamba i-ba-ij-ir-e t   rukiiri]]?

F-what chief SP-give-T   report   that thieves F-SP-steal-T morning

'What did the chief report that the thieves stole in the morning?'

b. ? **I-bau** chibu a-nenkani-ir-e [$_{NP}$ riboti [$_{CP}$ ati t i-ba-ij-ir-e ngombe rukiiri]]?

F-who chief SP-give-T report that F-SP-steal-T cows morning

'Who did the chief report that they stole the cows in the morning?'

c. ? **I-ri** chibu a-nenkani-ir-e [$_{NP}$ riboti [$_{CP}$ ati aamba i-ba-ij-ir-e ngombe t]]?

F-when chief SP-give-T report that thieves F-SP-steal-T cows

'When did the chief report that the thieves stole the cows?'

d.? **I-ku** chibu a-nenkani-ir-e [$_{NP}$ riboti [$_{CP}$ ati aamba i-ba-ij-ir-e ngombe t]]?

F-where chief SP-give-T report that thieves F-SP-steal-T cows

'Where did the chief report that the thieves stole the cows?

e. * **I-mbi nontu** chibu a-nenkani-ir-e [$_{NP}$ riboti [$_{CP}$ ati aamba i-ba-ij-ir-e

F-why F chief SP-give-T report that thieves F-SP-steal-T

ngombe t]]?'

cows

'Why did the chief give the report that the thieves stole the cows?'

f. * **N-ata** chibu a-nenkani-ir-e [$_{NP}$ riboti [$_{CP}$ ati aamba i-ba-ij-ir-e ngombe t]]?

F-how chief SP-give-T report that thieves F-SP-steal-T cows

'How did the chief give the report that the thieves stole the cows?'

The ungrammaticality of the sentences in (29e, f) and the markedness of the sentences in (29a-d) has been attributed to movement of the wh-phrase out of an NP-island, a barrier for extraction (cf. Ross 1967, Clements 1984). Note that the sentences in which wh-objects, wh-subjects and Class A wh-adjuncts are extracted are far less ungrammatical

than those in which Class B wh-adjuncts are extracted.[9] I stated in Chapter 1 that the ungrammaticality of such sentences is explained under the bounding theory.

If we examine whether the wh-phrases can occur *in situ* in the NP-island, we find a pattern similar to the one observed in sections 2.1.2. and 2.2.2. This is because questioned objects and Class A wh-adjuncts can be left *in situ* (30a-c) while Class B wh-adjuncts and subjects cannot (31a-c):

(30). a. Chibu a-nenkani-ir-e [NP riboti [CP ati aamba   ba-ij-ir-e   **mbi** rukiiri]]?
       chief SP-give-T   report   that thieves SP-steal-T   what morning
       'What did the chief report that the thieves stole in the morning?'

    b. Chibu a-nenkani-ir-e [NP riboti [CP ati aamba   ba-ij-ir-e   ngombe **ri**]]?
       chief SP-give-T   report   that thieves SP-steal-T cows   when
       'When did the chief report that the thieves stole the cows?'

    c. Chibu a-nenkani-ir-e [NP riboti [CP ati aamba ba-ij-ir-e ngombe **ku** rukiiri]]?
       chief SP-give-T   report   that thieves SP-steal-T cows where morning
       'Where did the chief report that the thieves stole the cows in the morning?'

(31). a. * Chibu a-nenkani-ir-e [NP riboti [CP ati **bau**   ba-ij-ir-e   ngombe rukiiri]]?
       chief SP-give-T   report   that who   SP-steal-T cows   morning
       'Who did the chief give the report that they stole the cows in the morning?'

---

[9] Some asymmetry is observed here between argument (objects, subjects) and quasi-arguments (when, where) on the one hand, and Class B adjunct wh-phrases (why, how) on the other. A similar asymmetry has also been observed in Malagasy (see Sabel 2002).

b. * Chibu a-nenkani-ir-e [NP riboti [CP ati aamba ba-ij-ir-e ngombe

     chief   SP-give-T   report   that thieves SP-steal-T cows

     mbi nontu]]?

     why

     'Why did the chief give the report that the thieves stole the cows?'

c. * Chibu a-nenkani-ir-e [NP riboti [CP ati aamba   ba-ij-ir-e ngombe ata]]?

     chief   SP-give-T   report   that thieves SP-steal-T cows   how

     'How did the chief give the report that the thieves stole the cows?'

Since the examples in (30) are grammatical with the wh-phrases *in situ* in the island configuration, it could be argued that there is actually no further movement of wh-phrase at LF. Simpson (2000) uses this idea of lack of subjacency effects with wh-*in situ* in a wh-island as a strong argument against LF wh-movement. He centers his criticism on the claim that if LF is a genuine syntactic level, then it should be subject to computational constraints affecting other levels (e.g. PF). According to him, the claim that subjacency does not hold at LF is therefore not acceptable. The violations in (31) are expected because wh-subjects and Class B wh-adjuncts cannot be left *in situ*.

2.3.2 Wh-islands

A wh-island results when one wh-phrase is moved to Spec CP of an embedded sentence, with the anticipation that a second wh-phrase is then moved across this filled Spec CP to a Spec CP position in a higher sentence. Object wh-phrases do not show uniform behaviour when they are moved across wh-adjuncts. For instance, while extraction of object wh-phrases across Class A wh-adjuncts is marginally acceptable (even completely

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acceptable for some speakers (32)), movement of object wh-phrases across Class B wh-adjuncts results in total ungrammaticality, (33):

(32)　a. (?) **I-mbi**$_j$　　u-ku-ama　　　[$_{CP}$ **i-ku**$_i$　　a-gur-ir-e　t$_j$ t$_i$]?

　　　　　F-what　　2nd SG-T-wonder　F-where　SP-buy-T

　　　　　'What do you wonder where he/she bought?'

　　b. (?) **I-mbi**$_j$　　u-ku-ama　　　[$_{CP}$ **i-ri**$_i$　　a-gur-ir-e　t$_j$ t$_i$]?

　　　　　F-what　　2nd SG-T-wonder　F-when　SP-buy-T

　　　　　'What do you wonder when he/she bought?'

(33)　a. * **I-kibi**$_j$　　u-ku-ama　　　[$_{CP}$ **i-mbi nontu**$_i$　a-gur-ir-e　t$_j$ t$_i$]?

　　　　　F-what　　2nd SG-T-wonder　F-why　　　　SP-buy-T

　　　　　'What do you wonder why he/she bought?'

　　b. * **I-mbi**$_j$　u-ku-ama　　　[$_{CP}$ **n-ata**$_i$　Joyce　a-coor-ir-e t$_j$ t$_i$]?

　　　　　F-what　2nd SG-T-wonder　F-how　Joyce　SP-T-draw-T

　　　　　'What do you wonder how Joyce drew?'

Subject wh-phrases can also be extracted across class A wh-adjuncts (34), again with marginal acceptability for some speakers and total acceptability to others, but the fact that extraction is impossible across Class B adjuncts, (35) is uniform to all speakers:

(34)　a. (?) **N-uu**$_i$　u-ku-ama　　　　[$_{CP}$ **i-ri**$_j$　　t$_i$　a-gw-ir-e t$_j$]?

　　　　　F-who　2nd SG-T-wonder　F-when　　SP-fall-T

　　　　　'Who do you wonder when she/he fell?'

b. (?) **N-uu**$_i$ u-ku-ama [$_{CP}$ **i-ku**$_j$ t$_i$ a-gw-ir-e t$_j$]?

    F-who 2nd SG-T-wonder F-where SP-fall-T

    'Who do you wonder when she/he fell?'

(35) a. * **N-uu**$_i$ u-ku-ama [$_{CP}$ **i-mbi nontu** t$_i$ a-gw-ir-e t$_j$]?

    F-who 2nd SG-T-wonder F-why SP-fall-T

    'Who do you wonder why she/he fell?'

b. * **Imbi**$_i$ u-ku-ama [$_{CP}$ **n-ata**$_j$ t$_i$ yu-rag-ir-e ntwiga t$_j$]?

    F-what 2nd SG-T-wonder F-how SP-kill-T giraffe

    'What do you wonder how it killed the giraffe?'

Movement of a wh-adjunct across another wh-adjunct is also unacceptable in Kitharaka (36):

(36) a. * **I-ku**$_i$ u-ku-ama [$_{CP}$ **i-ri**$_j$ a-ka-thi t$_i$ t$_j$]?

    F-where 2nd SG-T-wonder F-when SP-T-go

    'Where do you wonder when he/she will go?'

b. * **I-ri**$_i$ u-ku-ama [$_{CP}$ **i-ku**$_j$ a-ka-thi t$_j$ t$_i$]?

    F-when 2nd SG-T-wonder F-where SP-T-go

    'When do you wonder where he/she will go?'

c. * **I-ku**$_i$ u-ku-ama [$_{CP}$ **i-mbi nontu**$_j$ a-ka-thi t$_i$ t$_j$]?

    F-where 2nd SG-T-wonder F-why SP-T-go

    'Where (what place) do you wonder why he/she will go?'

d. * **I-ku**$_i$ u-ku-ama [$_{CP}$ **nata**$_j$ a-ka-thi t$_i$ t$_j$]?

    F-where 2nd SG-T-wonder F-how SP-T-go

    'Where do you wonder how he/she will go?'

It is also impossible to move adjunct wh-phrase across argument wh-phrases in Kitharaka, (37):

(37)　a.* **I-ku**$_i$　　u- ku-ama　　[$_{CP}$ **n-uu**$_j$　t$_j$　a-gur-ir-e　mugaate t$_i$]?

　　　　F-where　2nd SG-T-wonder　F-who　　SP-buy-T　bread

　　　　'Where do you wonder who bought a loaf of bread?'

　　b.* **I-ri**$_j$　　u- ku-ama　　[$_{CP}$ **i-mbi**$_i$　t$_j$　a-gur-ir-e t$_i$]?

　　　　F-when　2nd SG-T-wonder　F-what　　SP-buy-T

　　　　'When do you wonder what he/she bought?'

　　c.* **N-ata**$_i$　　u- ku-ama　　[$_{CP}$ **n-uu**$_j$　t$_j$　a-rug-ir-e　nkima t$_i$]?

　　　　F-how　　2nd SG-T-wonder　F-who　　SP-cook-T　food

　　　　'How do you wonder who cooked food?'

　　d. * **I-mbi nontu**$_j$　u- ku-ama　　[$_{CP}$ **i-mbi**$_i$　t$_j$　a-gur-ir-e t$_i$]?

　　　　F-why　　　2nd SG-T-wonder　F-what　　SP-buy-T

　　　　'Why do you wonder what he/she bought?'

Finally, when the wh-island is created by moving an argument wh-phrase to the embedded Spec CP, the results are highly marked when another argument is moved across this island, (38a-b). The judgement improves slightly when the moved wh-phrase is d-linked, (38c):

(38)　a.?? **I-mbi**$_i$　u- ku-ama　　[$_{CP}$ **n-uu**$_j$　t$_j$　a-gur-ir-e t$_i$]?

　　　　F-what　2nd SG-T-wonder　F-who　　SP-buy-T

　　　　'What do you wonder who bought?'

b.?? **N-uu**ⱼ   u- ku-ama   [$_{CP}$ **i-mbi**ᵢ   tⱼ   a-gur-ir-e tᵢ]?

F-who   2nd SG-T-wonder   F-what   SP-buy-T

'Who do you wonder what he/she bought?'

c.? **I-mwari uriku**ⱼ   u- ku-ama   [$_{CP}$ **i-mbi**ᵢ   tⱼ   a-gur-ir-e tᵢ]?

F-girl   which   2nd SG-T-wonder   F-what   SP-buy-T

' Which girl do you wonder what she bought?'

The table below summarises the observations made in section 2.2.5:

Table 3:   **Extraction of wh-phrases from islands**

	NP-island	Class A wh-adjunct in island	Class B wh-adjunct in island	Argument wh-phrase in island
Object extraction	?	✔ ?	*	??
Subject extraction	?	✔ ?	*	??
Class A wh-adjuncts	?	*	*	*
Class B wh-adjunct	*	*	*	*

2.4   Summary of key observations made in this chapter

In this chapter, I have looked at strategies of question-formation in Kitharaka and postulated that wh-questions in this language are formed by use of four major strategies, namely, wh-*ex situ*, wh-*in situ*, partial wh-movement and the intermediate strategy. I have looked at these strategies within simple and complex sentences and investigated their

productivity with respect to the placement of wh-objects, wh-subjects and wh-adjuncts. It is here that interesting asymmetries were observed.

I started with a discussion of wh-*ex situ* strategy in simple and complex sentences. It is only in this strategy that uniformity was found in the behaviour of wh-objects, subjects and adjuncts, as all categories of wh-phrases in Kitharaka can be moved to Spec CP position of the matrix sentence.

I also examined wh-*in situ* within simple and complex clauses (including NP islands) and observed that while it is possible to leave wh-objects and Class A wh-adjuncts (*ri* 'when' and *ku* 'where') in the *in situ* position, such constructions are unacceptable for wh-subjects and Class B wh-adjuncts.

Next, I considered the intermediate strategy and showed that this strategy was fully acceptable for wh-objects and Class A wh-adjuncts, but resulted in reduced grammaticality for wh-subjects (in complex sentences) and Class B wh-adjuncts. As with wh-*in situ*, some asymmetry was observed in the placement of wh-objects and Class A wh-adjuncts on the one hand, and wh-subjects and Class B adjuncts on the other.

With respect to partial wh-movement, it was observed that wh-objects, and Class A wh-adjuncts can be moved to all Spec CP positions in embedded sentences. It was also noted that a sentence with a partially moved wh-subject was only fully acceptable if the wh-phrase occupied the highest embedded Spec CP. Some peculiar behaviour was observed

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with the adjunct *nata* 'how', as movement of this wh-phrase to some higher embedded Spec CP resulted in an ungrammatical sentence. The only way for moving it partially is to move this wh-phrase to Spec CP of the sentence *in which it originates.*

I then considered movement of wh-phrases from wh- and NP-islands. It was observed that no category could be extracted out of NP-islands in Kitharaka. However, it was noted that extraction of Class B wh-adjuncts produced worse ungrammaticality than extraction of object, subject and Class A wh-phrases. An interesting contrast was also noticed as far as extraction from wh-islands is concerned. I illustrated that it is possible (for some speakers) to extract argument wh-phrases (objects and subjects) across Class A wh-adjuncts but not across Class B wh-adjuncts. Furthermore, I showed that extraction of argument wh-phrases across other argument wh-phrases produces marked results. Adjunct wh-phrases cannot be moved out of any wh-island.

Finally, the observation was made that all wh-phrases bear the focus marker (*n-* if they start with a vowel and *i-* if they start with a consonant) if they are displaced from their base position. Closely related to this was the observation that whenever a wh-phrase is moved from some embedded sentence to some higher landing site, all verbs in the lower sentences, except the one adjacent to the wh-phrase, bear the focus marker *n-*.

The data in this chapter raises several questions:

1. What are the differences between Class A and Class B wh-adjuncts which account for their different behaviour with respect to wh-*in situ*, partial wh-movement and the intermediate strategy?

2. Why can't subjects stay *in situ*?

3. Why is the intermediate strategy only marginally possible with wh-subjects?

4. Why is the possibility of extracting a wh-phrase out of a wh-island contingent on the character of the wh-phrase which constitutes that island?

5. Why are moved wh-phrases marked with the focus marker *n-/i-* regardless of whether the wh-phrase occurs in the intermediate strategy, in the partial wh-movement or in *ex situ* questions?

6. What solution can be suggested for the observation that whenever there is overt long wh-movement in Kitharaka, all verbs in the embedded sentences except the one adjacent to the wh-phrase bear the focus particles? And why is this not found when wh-phrases occur *in situ* in embedded sentences?

7. What position does the wh-phrase occupy in the intermediate strategy?

These are definitely interesting questions which need to be addressed. However, due to limitations of space, I can only address questions 5-7 in this study and leave the rest as potential topics for future research. Question 7 will be addressed in Chapter 4.

In order to see why there is a correlation between wh-movement and the occurrence of focus markers (question 5 and 6)), I will discuss the theory advanced in Sabel (2000) in Chapter 3.

CHAPTER 3: ON THE RELATION BETWEEN FOCUS MARKERS AND WH-MOVEMENT

In this chapter I demonstrate that wh-movement in Kitharaka is triggered by morpho-syntactic focus features, which may reside covertly in functional heads or get overt manifestation as focus markers. I also provide a detailed discussion of the theory proposed in Sabel (2000) which makes the prediction that focus features trigger wh-movement and show that most properties of wh-questions in Kitharaka are elegantly captured by his theory.

3.1 Focus and wh-movement

Consider the data in (1a-c) below:

(1)   a. *John   on-ir-e   **n-uu?**
             John   see-T-FV F-who
             'Who did John see?'

        b. * **Uu**   John on-ir-e t?
              who   John see-T-FV
              'Who did John see?'

        c. **N-uu**   John on-ir-e t?
           F-who John see-T-FV
           'Who did John see?'

We find in (1a) that a wh-phrase cannot occur in the *in situ* position if it bears a focus marker. We also observe that a wh-phrase cannot be moved to the initial position of the

sentence if it does not have a focus particle, (1b). A sentence in which the wh-phrase bearing a focus particle is fronted is grammatical, (1c). It could therefore be argued that it is the focus marker attached to the wh-phrase that triggers wh-movement in Kitharaka.

Evidence for the claim that the prefixes *n-* and *i-* are genuine focus markers and that they trigger movement comes from the observation that all focalized NPs (=DPs) in Kitharaka must bear these prefixes. They must also be moved to a leftward landing site, (2):

(2)   a. N-ibuku   Peter   a-gur-ir-e t   (ti karamu)
            F-book   Peter   SP-buy-T-FV   (not a pen)
            'It is a book that Peter bought (not a pen).'

        b. I-muti   Vincent   a-tem-ir-e t (ti karai).
            F-tree   Vincent   SP-cut-T-FV (not basin)
            'It is a tree that Vincent cut (not a basin).

It is actually impossible to have an NP with the focus marker in the *in situ* position in Kitharaka, (3). In addition, an NP cannot be moved to a focus position if it does not bear a focus particle, (4). The capital letters indicate the XP that is supposed to bear focus.

(3)   a. * Peter   a-gur-ir-e   n-ibuku (ti   karamu).
            Peter   SP-buy-T-FV   F-book (not pen)
            'It is a book that Peter bought (not a pen).'

        b. * Vincent   a-tem-ir-e   i-muti (ti   karai)
            Vincent   SP-cut-T-FV   F-tree (not basin)
            'It is a tree that Vincent cut (not a basin).'

(4) a. * IBUKU   Peter   a-gur-ir-e t   (ti karamu)
          book   Peter   SP-buy-T-FV   (not pen)
     'It is a book that Peter bought (not a pen).'

     b. * MUTI   Vincent   a-tem-ir-e t   (ti   karai)
          tree   Vincent   SP-cut-T-FV   (not basin)
     'It is a tree that Vincent cut (not a basin).'

Evidence from focalization of NPs therefore suggests that the Kitharaka prefixes *n-* and *i-* are focus markers and they are the ones that trigger movement. Furthermore, it could be assumed, that these focus morphemes are a reflex of syntactic focus features associated with a functional head, so that movement of the wh-phrase or an NP to a left peripheral position is taken to be necessitated by the need to create a Spec head relation between the wh-phrase and this functional head (e.g. C°), a canonical configuration required for any feature checking in the Minimalist Program. But are these morphemes really purely a reflex of syntactic features as we are assuming here?

A possible objection to the view that focus markers are syntactic in nature and that they trigger wh-movement comes from the well-established fact that wh-phrases are semantically the focus of the sentence because they always ask for new unknown information. Since all focused phrases have a focus feature (reflected by the focus particle) and are moved (cf. (2) and (3)), it might be that therefore, wh-phrases always need to be focused marked and moved. However, (5) shows that a phrase can be semantically focused (because it is a wh-phrase), but is not moved because it is not focus marked. The wh-phrase is therefore left *in situ* (cf. Chapter 2 section 2.1.2).

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(5)   John   on-ir-e   **uu?**
      John   see-T-FV   who
      'Who did John see?'

Only when a focus marker is added does the wh-phrase undergo movement (see (1c) above). It could thus be assumed that in addition to the inherent focus semantics of wh-phrases, there is a syntactic focus marker which is a reflex of focus features and which triggers movement of wh-phrases in Kitharaka to the left periphery.[1]

I have also shown in (2-4) above that a focalized NP must have the focus particle and must also be moved to a leftward landing site (it cannot remain *in situ*). It could thus be argued that in the absence of *inherent semantic focus ability*, focalized NPs, unlike wh-phrases, must bear the focus particle, and since this particle always triggers movement as we have already established, the NPs must always end up in a position that is reserved for focused elements (see Chapter 4 for details). An immediate prediction of the NP-focus analysis that I am developing here is that in the absence of inherent focus ability, we cannot have NP-focus *in situ* in Kitharaka. This is borne out by empirical evidence as can be seen in (6).

(6)   * Peter   a-gur-ir-e   **IBUKU** (ti   karamu)
        Peter   SP-buy-T-FV   book   (not pen)
        'It is a book that Peter bought (not a pen).'

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[1] A simple way to understand the relation of focus and movement would be to assume that what we call the focus marker is actually a *movement particle*, which forces movement when added to DPs and wh-phrases. Such a movement particle should also be assumed to have a strong feature which needs to be checked by overt movement. I will however continue to work with the term focus particle.

Although the obligatory presence of focus markers on focalized NPs and moved wh-phrases, and the absence of focus markers in the *in situ* wh-phrases already casts doubt on a purely semantic explanation for the co-occurrence of focus markers and wh-movement, there is also data from long wh-movement that shows that there is *a syntactic* trigger for wh-movement which is associated with focus.

Bahasa Indonesia (Austronesian) allows for wh-*in situ* and *ex situ* in the formation of wh-questions. When the *in-situ* strategy is used, no focus marker occurs in C^0, (7a). However, with wh-*ex situ*, the focus marker *yang* obligatorily appears in C^0, (7b):

(7)   a. Sally   men-cintai   **siapa?**
          Sally   trans-loves   who
          'Who does Sally love?'

        b. **Siapa$_i$** **yang** Sally cintai t$_i$?
          who   Foc   Sally love
          'Who does Sally love?'   (Sabel 2000: 429)

As the overt focus marker *yang* appears with the *ex situ* but not with the *in situ* strategy, we can conclude that as in Kitharaka, there is a co-occurrence of focus and wh-movement in Bahasa Indonesia.

What is more interesting in Bahasa Indonesia is that when there is long wh-extraction, the overt focus marker *yang* also features in the C^0 of the embedded sentence, (8):

(8)   Siapa_i **yang** Bill harap **yang**   t_i akan membeli baju   unntuknya
       who   F   Bill hope F   will buy   clothes   for him
       'Who does Bill hope will buy clothes for him?'   (Sabel 2000: 429)

The presence of the focus marker in the embedded C^o serves as a strong indicator that it is indeed *a syntactic* focus marker that is responsible for successive and cyclic wh-movement (cf. Sabel 2000: 430). If the focus marker were really only a semantic necessity of the wh-phrase, we would expect to find it only in the position where the wh-phrase takes scope. Example (8) however, shows the contrary.

Recall that a similar observation can be made with respect to long wh-movement in Kitharaka. As already shown in Chapter 2, Kitharaka allows for the occurrence of wh-*ex situ* and *in situ* in complex sentences. With wh-*in situ*, (9a), no element in the whole construction bears the focus particle. However, for wh-*ex situ* and long NP-focus movement, the focus marker appears not just on the fronted wh-phrase but also on the verbs in the embedded sentences (although not on the verb adjacent to the wh-phrase), (9b, c):

(9)   a. U-ri-thugania ati John a-ug-ir-e Lucy   a-ug-ir-e Pat a-ring-ir-e   **uu**?
       2nd SG-T-think that John SP-say-T Lucy SP -say-T Pat SP-beat-T   who
       'Who do you think that John said Lucy said Pat beat?'

       b. **N-uu** u-ku-thugania ati John n-a-ug-ir-e Lucy n-a-ug-ir-e Pat n-a-ring-ir-e t?
       F-who 2nd SG-T-think that John F-SP-say-T Lucy F-SP-say-T Pat F-SP-beat-T
       'Who do you think that John said Lucy said Pat beat?'

c. N-ibuku$_i$ mb-itik-iti-e ati John n-a-ug-ir-e Lucy n-a-ug-ire Pat   n-a-gur-ir-e t$_i$?

F-book 1stSG-believe-ST that John F-SP-say-T Lucy F-SP-say-T Pat F-SP-buy-T

'It is a book I believe that John said Lucy said Pat bought.'

The conclusion to be drawn is that the focus features realized on the wh-phrase/NP and on some functional head trigger NP and wh-movement in Kitharaka.

The observations made in this subsection can thus be summarized as (10) below:

(10)   a.   Wh-movement in Kitharaka is triggered by a syntactic focus feature which may appear on the wh-phrase, or in a functional head. The features realised in a functional head are morphologically made manifest by the focus marker attached to the verb.

     b.   Wh-movement in Kitharaka is similar to NP-focus movement, as in both cases the focus marker must appear on the overtly moved wh-phrase or NP.

With the data examined in the preceding sections, the most obvious question that emerges is: what property (perhaps inherent) do focus features have that enable them to trigger wh-movement in Kitharaka and other languages? To answer this question, we need to discuss in detail the theory proposed in Sabel (2000).

3.2   The trigger for wh-movement (Sabel 2000)

The observation that there is a strong correlation between the occurrence of focus markers and wh-movement is not new. It has been studied in detail by Sabel (2000), who investigated data from Kikuyu, an SVO Bantu language spoken by one of the groups of

the Central Bantu of Kenya. Sabel develops a formal analysis of the correlation between

focus marking and wh-movement on the basis of the feature checking approach of the

Minimalist Program. His analysis addresses two major issues:

(11)   a. The nature of the features that trigger movement
        b. The locus of these features

Sabel's central hypothesis is that wh-movement is triggered by two types of features:

[+wh] and [+focus] features. As [+focus] and [+wh] features are [+interpretable], Sabel

argues, in agreement with the basic tenets of the MP, that these features have to be

checked by overt movement only when they are *strong* (see Chapter 1). For weak

[+interpretable] features, Sabel claims that they do not need to be checked at any level in

the syntax.[2] Languages that simultaneously allow wh-*ex situ* and wh-*in situ* are thus

assumed to have a weak and a strong variant of the wh- or focus feature in the lexicon.

Sabel also argues that languages are parameterised with respect to where focus and wh-

features can be found. His main conjecture is that while wh-features are only found in the

position where the wh-phrase takes *scope* (matrix C^{o}), focus features can be found in

scopal and in embedded non-scopal environments. Sabel further claims that whenever a

wh-feature occurs in C^{o} of the matrix sentence, a focus feature co-occurs with it and, in

the case of long wh-movement, the focus feature also appears in all embedded C^{o} s.

Sabel's parameterisation of the locus of wh- and focus features helps to account, in a

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[2] Sabel (2000) agues against the idea that wh-phrases move at LF. The problem that his theory
gets into is how wh-phrases *in situ* get scope in the absence of LF movement. Sabel claims that a
wh-phrase *in situ* is co-indexed and c-commanded by the scopal Spec CP position in which it is
interpreted. It is this kind of syntactic configuration that enables the wh-phrase to take the right
scope.

uniform way, for the differences observed across languages with respect to the acceptability of partial wh-movement. For example, if a language does not allow partial wh-movement (movement of a wh-phrase to an embedded, non-scopal Spec CP), it is because wh-movement in this language is triggered by a strong wh-feature, not by the strong focus features. English belongs to this category, (12):

(12) a. * You think **who** t saw Mary?
       b. * **What** do you think **who** t saw Mary?
       c. **Who** do you think t saw Mary?

(12a) is ungrammatical because movement of the wh-phrase to an embedded Spec CP creates a situation where the strong wh-feature in the matrix C^o scopal position is not checked. Only if the wh-phrase is fronted as in (12c) is the sentence grammatical, because the strong wh-feature in the matrix C^o head is checked as a consequence of movement of the wh-phrase (*who*) to its specifier position. Observe further that even if a wh-expletive (*what*) were inserted in the Matrix Spec CP (12b), the sentence would still be ungrammatical, as a wh-expletive cannot check a strong wh-feature (cf. Sabel 2000:438).

In languages that allow wh-movement to an embedded non-scopal landing site, the trigger for movement is not a strong wh-feature, but a strong *focus* feature. Obviously, wh-features in such languages are weak (otherwise the wh-phrase would have to move to the highest Spec CP to check the strong wh-feature). German is one language that allows partial wh-movement, (13):

(13)   a. **Was** meinst du   **wen**   Peter Hans t vorgestellt hat?

           what think you   who   Peter Hans introduced has

           'Who do you think Peter has introduced to Hans?'

         b. **Wen** meinst du   daß Peter Hans t vorgestellt hat?

           who think you   that Peter Hans introduced has

           'Who do you think Peter has introduced to Hans?'   (Sabel 2000: 410)

There are two strategies in German. The wh-phrase (*wen*) can be moved to the scopal Spec CP as in (13b) in order to check the strong focus feature in the highest and embedded C^{o}. Wh-movement therefore occurs successive-cyclically as the feature in the embedded C^{o} must also be checked. Alternatively, the real or substantive wh-phrase (*wen*) can be partially moved to an embedded Spec CP. The higher scopal position is then occupied by a semantically vacuous wh-phrase (*was*), as is shown in (13a). Sabel argues that this wh-expletive serves two functions: it marks the scope of the substantive wh-phrase, and it checks the strong focus feature in the matrix C^{o}. A wh-expletive can therefore check a strong focus feature, but not a strong wh-feature.

Having set Sabel's theory off the ground, the task now remains to show how his analysis can be applied to Kitharaka.

3.3   Conclusions for Kitharaka

In this sub-section, I analyse Kitharaka data in light of the formal framework proposed in Sabel (2000).

I showed in Chapter 2 that Kitharaka allows for partial wh-movement. Given this observation, it follows from Sabel's theory that the trigger for wh-movement in Kitharaka is a *strong focus feature*. The wh-feature must therefore be weak in Kitharaka. Given that Kitharaka also allows wh-*in situ*, it should be the case that Kitharaka has two focus feature specifications in the lexicon: a strong and a weak focus feature. Furthermore, we can assume that the presence of strong focus features which trigger wh-movement in Kitharaka is reflected in two ways: by the focus marker attached to the wh-phrase and the focus marker attached to the verbs in the embedded sentences (see 9b, c). On the other hand, the presence of a weak focus feature is reflected by the absence of a focus marker on the wh-phrase.

In a simple *ex situ* wh-question (see (14)), the wh-phrase is in Spec CP. The strong abstract focus feature should therefore be in C^o. It is this strong feature that attracts the feature in the wh-phrase, causing movement of this wh-phrase to its specifier position. Morphologically, Spec head agreement between the focus feature and the wh-phrase is signaled by the presence of the focus marker on the wh-phrase.

(14)   **N-uu**   Peter on-ir-e t?
        F-who   Peter   see-T-FV
        'Who did Peter see?'

In a long wh-*ex situ* question, (15), the strong focus feature resides in all C° heads. It is the feature in the embedded C°s (morphologically reflected by the focus marker attached to the verbs) that triggers successive and cyclic wh-movement in long wh-questions in Kitharaka.

(15) **N-uu** u-ku-thugania ati   John **n-a-ug-ir-e** Lucy **n-a-ug-ir-e** Pat **n-a-kis-ir-e** t?
       F-who 2nd SG-T-think that John F-SP-say-T Lucy F-SP-say-T Pat F-SP-kiss-T
       'Who do you think that John said Lucy said Pat kissed?'

The claim I am making about the relation of the abstract focus feature in C° and the morphological focus markers attached to the verbs is also similar to what happens in 3rd person agreement marking in English. In English, the abstract third person singular feature must be in INFL in order to create a Spec head configuration which is necessary to induce agreement with the subject in Spec IP. However, when it comes to phonetic realization, the agreement marker (–*s*) appears as a verbal suffix, although there is no verb to INFL movement in English. The focus markers attached to the verbs could therefore be argued to be an overt manifestation of strong focus features in C°. This claim about the relation between the focus marker on the embedded verbs and the abstract focus feature in C° also holds for the partial wh-movement and long intermediate strategy to be discussed below.

In partial wh-movement (16), the wh-phrase occurs in an embedded specifier position.

(16) U-ri-thugania   **n-uu** John a-ug-ir-e   Lucy **n-a-ug-ir-e** Pat **n-a-kis-ir-e** t?
       2nd SG-T-think F-who John SP-say-T Lucy F-SP-say-T Pat F-SP-kiss-T
       'Who do you think that John said Lucy said Pat kissed?'

Following Sabel's analysis and the conclusion we have drawn concerning the focus marker attached to the verbs, it can be argued that the wh-phrase in partial wh-movement constructions moves to check the strong focus feature in all C^o s embedded under the wh-phrase as well as the feature in the wh-phrase itself. The problem we get into here is to explain how the strong focus feature in the matrix C^o is checked, and how the wh-phrase acquires scope in Kitharaka in the absence of a wh-phrase in the higher scopal position. Recall that when the real wh-phrase is partially moved in German (cf. example 13a), the higher scopal position is occupied by a wh-expletive (*was*). It was argued that this expletive marks scope and it checks the strong focus feature in the matrix C^o. In order to account for examples like (16) from Kitharaka I will assume, following a suggestion made by Sabel (2000) about Kikuyu, that Kitharaka has a covert (i.e. phonetically null) wh-expletive in the matrix Spec CP. It is this covert wh-expletive that marks scope and checks the strong focus feature in the highest C^o.

Finally, in the intermediate strategy, a wh-phrase occurs in a position between the subject and the verb. According to Sabel's theory, the trigger for this movement should also be a strong focus feature located in some functional head. I will offer an account for the intermediate strategy based on this assumption in Chapter 4.

CHAPTER 4:   THE INTERMEDIATE STRATEGY

4.1   Introduction

Consider sentences (1a-c) below illustrating the intermediate strategy, which are related to the data already discussed in Chapter 2:

(1)   a. Lilian **n-uu** a-rum-ir-e t?

       Lilian   F-who SP-bite-T-FV

       'Who did Lilian bite?'

       b. U-ri-thugania ati John **n-uu** a-ug-ir-e Colomba n-a-ug-ir-e Peter n-a-tum-ir-e t?

       2^{nd}SG-T-think that John F-who SP-say-T Colomba F-SP-say-T Peter F-SP-send-T

        'Who do you think that John said Colomba said Peter sent?'

       c. U-ri-thugania John a-ug-ir-e ati Colomba **n-uu** a-ug-ir-e Peter n-a-tum-ir-e t?

       2nd SG-T-think John SP-say-T that Colomba F-who SP-say-T Peter F-SP-send-T

        'Who do you think John said that Colomba said Peter sent?'

The data in (1) suggests, as we saw in Chapter 2, that the wh-phrase is moved to a position between IP and VP.

Additional support for the assumption that there is a landing site between the subject and the verb comes from the observation that a focus-bearing NP can as well be moved to a position between the subject and the verb, (2):

(2)   a. Peter   **n-ikome**$_i$ a-gur-ir-e t$_i$.

       Peter   F-egg   SP-buy-T-FV

       'It is an egg that Peter bought.'

b. Vincent   i-rurigi$_i$ a-git-ir-e t$_i$

   Vincent   F-thread SP-cut-T-FV

   'It is a thread that Vincent cut.'

The focus of this chapter is therefore to identify the syntactic position which the wh-phrase occupies in the intermediate strategy. Is it really between IP and VP as we have assumed so far?

4.2   The position of the wh-phrase in the intermediate strategy

In this section, I will show, using a number of characteristics of constructions whose constituents are moved to the left periphery, as well as some syntagmatic constraints on these moved constituents, that the wh-phrase in the intermediate strategy does not move to a position between IP and VP.

I illustrated in Chapter 2 that there was a problem with the assumption a wh-phrase moves to Spec CP in partial wh-movement constructions because when an overt complementiser co-occurred with a wh-phrase in the same clause, the wh-phrase was realised in its immediately following right position (see footnote (7) chapter 2). Similar examples are repeated in (3):

(3)   a. John a-ug-ir-e   ati   **i-mbi$_i$**   muntu   uju a-gur-ir-e t$_i$?

         John SP-say-T that F-what   person this SP-buy-T

         'What did John say that this person bought?'   (object wh-phrase)

b. John   a-ug-ir-e   ati   **n-uu**$_i$ t$_i$ a-gur-ir-e   ibuku   riri?

     John SP-say-T   that   F-who   SP-buy-T   book   this

     'Who did John say bought this book?'   (subject wh-phrase)

A temporary solution to this problem was posited under the assumption that Kitharaka employs the doubly filled COMP filter, so that in the absence of an overt complementiser, the wh-phrase moves to Spec CP. In this section however, I will show that a uniform landing site for Kitharaka wh-phrases can be arrived at without the need to resort to the doubly filled COMP analysis. I will come back to this as soon as a broad enough analysis of the intermediate strategy is developed.

I argued in Chapter 3 that wh-phrases which bear a focus marker are moved to Spec CP, and this movement is forced by the need to check a strong focus feature in $C°$. The relevant point for us here is that the wh-phrases are in a position above IP in (3), and this is demonstrated by the presence of the overt focus marker *i-* and *n-*on the wh-phrases. Recall the observation in Chapter 2 that a wh-phrase cannot be left in Spec IP (hence the absence of subject wh-*in situ*). Strangely, the position occupied by the wh-phrases in (3) is also below the complementiser, so what is this position between $C°$ and IP that can serve as a potential landing site for Kitharaka wh-phrases?

The existence of a systematic landing site between $C°$ and IP also becomes clear from the observation that such a syntactic position is also a potential landing site for focalized NPs, (4):

(4)   a. John   a-ug-ir-e   ati   **n-ibuku$_i$**   muntu   uju   a-gur-ir-e t$_i$.

         John   SP-say-T   that   F-book   person   this   SP-buy-T

         'John said that it is a book this person bought.'   (object focus)

    b. John   a-ug-ir-e   ati   **i-muntu**   uju$_i$ t$_i$ a-gur-ir-e   ibuku.

         John   SP-say-T   that   F-person   this   SP-buy-T   book

         'John said that it is this person who bought a book.'   (subject focus)

It can therefore be concluded from (3 & 4) that there is uniform position between C^o and IP where wh-phrases and focalized NPs can be moved.

In the light of this conclusion, consider (5):

(5)   John   a-ug-ir-e   ati   ibuku   riri$_j$ **n-uu$_i$**   t$_i$ a-gur-ir-e t$_j$?

      John   SP-say-T   that   book   this   F-who   SP-buy-T

      'Who did John say bought this book?'

In (5), the subject wh-phrase *nuu* 'who' has been moved to a position above IP. Importantly, the object NP *ibuku riri* 'this book' has been moved as well occurring between the moved wh-subject and C^o. (5) is therefore similar to (3b), the only difference is that the object-NP intervenes between the complementiser and the subject wh-phrase.

Example (5) is also similar to the intermediate strategy. The only difference is that instead of movement of the object NP (topic) across the wh-subject, (5), the subject NP is the one that is moved across the wh-object in the intermediate strategy. Other than the order object NP, wh-subject in (5), we have the order subject NP, wh-object in (6):

(6)   Lilian$_j$ **i-mbi**$_i$ t$_j$ a-cam-ir-e t$_i$?

Lilian   F-what   SP-taste-T-FV

'What did Lilian taste?'

The intermediate strategy does not therefore involve movement of a wh-phrase to a position between IP and VP.

The conclusion to be drawn from (5) and (6) is that Kitharaka has two positions between IP and C° where wh-phrases/NPs (focus marker-bearing elements) and topics (non focus-bearing constituents) can be moved.

It is also important to note that the order of a topic and a wh-phrase cannot be reversed, (7):

(7)   * John   a-ug-ir-e   ati   **n-uu**$_i$ ibuku   riri$_j$ t$_i$ a-gur-ir-e t$_j$?

John   SP-say-T   that   F-who   book   this   SP-buy-T

'Who did John say bought this book?'

The ungrammaticality of (7) shows that the order of positions to which a constituent bearing a focus particle and one without such a focus particle can move is fixed. The elements bearing the focus particle occupy a syntactic position below the phrases without a focus marker.

The analysis we have developed here makes one crucial prediction: since a moved wh-phrase and the focalized NP both bear a focus marker, they cannot occur in the same

clause as they possibly occupy the same syntactic position. This is borne out by the ungrammaticality of example (8):

(8)   *John   a-ug-ir-e   ati   n-ibuku   riri$_j$ **n-uu$_i$**   t$_i$ a-gur-ir-e t$_j$?
        John   SP-say-T   that   F-book   this   F-who   SP-buy-T
        'Who did John say that it is this book that he bought?'

It should be noted that while a moved wh-phrase and a focalized NP are incompatible, a focalized NP and a wh-phrase *in situ* can co-occur in the same clause without any ungrammaticality, (9):

(9)   **I-John**   a-ring-ir-e   **uu?**
        F-John   SP-beat-T-FV   who
        'Who is it (that) John hit?'

The compatibility of a focalized NP and an *in situ* wh-phrase as opposed to the incompatibility of a focalized NP and a moved wh-phrase strongly suggests that a focalized NP and a moved wh-phrase compete for the same syntactic position.

The impossibility of co-occurrence of wh-phrases and focalized NPs has also been noted in Italian, (10):

(10)   a. *A GIANI   che   cosa   hai   detto   (, non a Piero)?
          'TO GIANI   what   did   you   tell   (, not to Piero)?'

       b. * Che cosa   A GIANI   hai   detto   (, non   a Piero)?
          'What   TO GIANI   did   you tell (, not to Piero)?'   (Rizzi 1997: 291)

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Our analysis of the intermediate strategy therefore sums to this observation: there are two positions above IP where the focus marked wh-phrase and the topicalised NP move. In the following section I explore the properties of these 2 positions above IP in light of the theory developed in Rizzi (1997).

4.3   On the split C-system (Rizzi 1997)

Rizzi (1997) assumes, in the spirit of the Minimalist Program, that movement of elements to the left periphery (positions above IP) is motivated by the need to check some quasi-morphological features. He further argues that feature checking is only possible under a Spec head relation, a syntactic configuration needed to satisfy a criterion (e.g. Wh-criterion, negation criterion, focus criterion and topic criterion). I will follow him in this respect and assume that the wh-phrase moves to a specifier position in the intermediate strategy, in order to check some strong focus feature in some functional head.

Given the popular assumption that most elements (e.g. wh-phrases, topics, relative pronouns) that occupy a position above IP move to Spec CP, it becomes difficult to account for how features of phrases are checked if more than one phrase moves to this region (see example (5) and (6) from Kitharaka). It is this problem that leads Rizzi to argue against a simplistic C-system with a single layer made up of only CP. He instead proposes, on the basis of empirical evidence, for a richer fragmented C-system based on two main systems, the force-finiteness system and the topic-focus system.

Rizzi argues that the force-finiteness system performs two roles in the clausal structure. It gives us information about the type of the clause, whether it is a relative clause, a wh-question, an exclamative etc. This is where the notion of *force* comes in. He also notes that force may be expressed by overt morphological marking on a head (e.g. special C morphology for questions) or by projecting a structure to host an operator of the right kind (e.g. Spec CP for moved wh-phrases), or by both ways, that is, overt morphological marking in C as well as movement of the right kind of operator to its specifier position, although this is rare.

The C-system can also convey information on finiteness. In other words, there is a way in which the complementiser determines (though there is parameterisation across languages), the tense of the IP clause. For example, the presence of *that* in C° calls for a tensed sentence, while the realization of *for* demands for a non-finite clause, (11).

(11)   a. John said that Mary is sick
        b. * John said that Mary to be sick.
        c. It is foolish for Bernardo to argue against Kayne's proposal.
        d. * It is foolish for Bernardo is arguing against Kayne's proposal

The fact that a finite verbal form is selected by a C system bearing the feature [+ Fin] also enables us to explain why a higher verb (e.g. an ECM verb) cannot select a tensed IP, (12):

(12)   a. * I believe [him is smart].
        b. I believe [him to be smart].   (Rizzi 1997: 327)

Since *believe* does not have the selective [+ Fin] feature specification unique to C, it cannot select a tensed verb form, hence the ungrammaticality of (12a).

The split C-system thus starts with a force phrase (Force P) at the higher node and ends with finite phrase (Fin P).

Other than determining the type of the clause and (sometimes) the tense of the IP clause, Rizzi (1997) also observes that the C-system can convey information on focalization (focus) and topicalisation. He draws the distinction between topics and focalized constituents by showing that a topic head takes a comment as its complement, (13), but a focus head C-selects a presupposition, (14):

(13)   TopP   (14)   FocP
        XP   Top'   ZP   Foc'
           Top°   YP   Foc°   WP

        XP = topic   ZP = focus

        YP = comment   WP = pressuposition
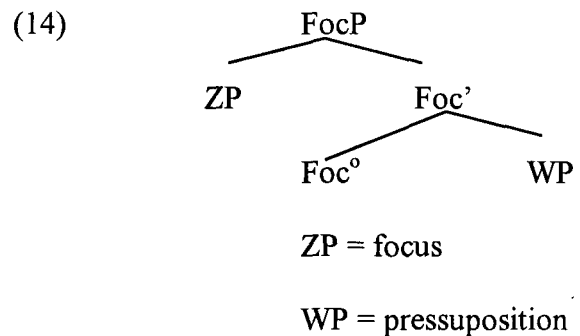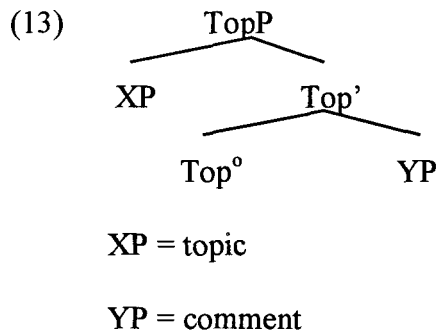
A topic expresses old in formation which can be recovered from previous discourse; the comment is an open sentence which is predicated of the topic and introduces new information as shown by the example in (15). A focalized NP on the other hand introduces new information, and the open sentence provides information which is presupposed to be known to both the speaker and the hearer, (16). In (16), the part after

the focalized NP possibly presupposes that somebody has given my book to Paul, but in (15) there is no pressuposition.

(15)   Your book, you should give t to Paul (not to Bill)

(16)   YOUR BOOK you should give t to Paul (not mine)   (Rizzi 1997: 285).

In Italian, the difference between the topic-comment articulation and the focus-pressuposition articulation is more vivid because the former but not the latter field is characterised by use of Clitic left Dislocation structures involving a resumptive pronoun co-referential to the topic. For details on the distinction between the topic-comment articulation and the focus-pressuposition articulation, see Rizzi (1997).

Rizzi further claims that the topic-focus field is only realised when there are topics and focalized NPs with features which need to be checked. In the absence of topics and focalized NPs, the C-system remains one (as CP) - it is not activated. Importantly, when there are topics and focalized NPs to occupy the topic-focus zone, they are realised (*sandwiched* is the word he uses) between force phrase (ForceP) and finiteness phrase (FinP).

The structure that Rizzi proposes for the split C-system is given in (17):

(17)　　　ForceP

```
ForceP
 └─ Force'
     ├─ Force°
     └─ TopP*
         └─ T'
             ├─ Top°
             └─ FocP
                 └─ Foc'
                     ├─ Foc°
                     └─ TopP* ¹
                         └─ Top'
                             ├─ Top°
                             └─ FinP
                                 └─ Fin'
                                     ├─ Fin°
                                     └─ IP
```
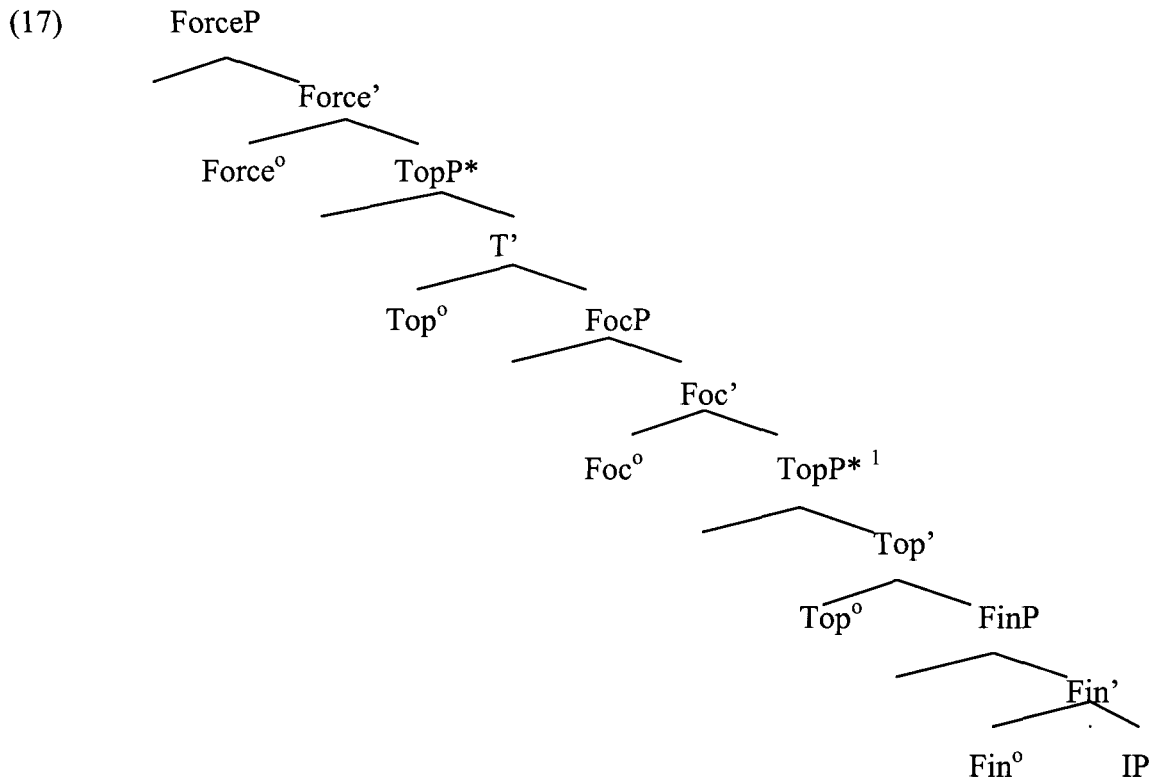
Rizzi (1997) empirically motivates the existence of these hierarchically ordered phrasal positions above IP. Consider the data below:

(18)　a. Un uomo a cui, il premio Nobel, lo daranno senz'altro.

　　　　'A man to whom, the Nobel Prize, they will give it undoubtedly.'

　　　b. * Un uomo, il premio Nobel, a cui lo daranno senz'altro.

　　　　'A man, the Nobel Prize to whom they will give it undoubtedly.'

(19)　a. * A chi, il premio Nobel, lo daranno?

　　　　'To whom, the Nobel Prize, will they give it?'

---

[1] Rizzi (1997) puts asterisks on the topic positions to show that topics may occur recursively.

b. Il premio Nobel, a chi lo daranno?

'The Nobel Prize to whom will they give it?'   (Rizzi 1997: 289)

The example in (18) shows that a relative operator occupies a position higher than a topic. According to the structure provided in (17), relative operators move to Spec ForceP, the highest specifier position. (19) then demonstrates that a topic occupies a position higher than a wh-phrase (Spec TopP) and the wh-phrase a position lower than that of the topic (Spec FocP).

Rizzi also demonstrates that complemetisers in Italian do not occupy a uniform syntactic position. He shows that the finite complementiser (*che*) always precedes a left dislocated phrase, (20), but the non-finite one (*di*) must follow the left moved phrase, (21):

(20)   a. Credo **che** il tuo libro, loro lo apprezzerebbero   molto

   'I believe that your book, they would appreciate it a lot.'

   b. *Credo, il tuo libro, **che** loro lo apprezzerebbero molto.

   'I believe, your book, that they would appreciate it a lot.'

(2i)   a. *Credo **di** il tuo libro, apprezzarlo molto.

   'I believe 'of' you book to appreciate it a lot.'

   b. Credo, il tuo libro, **di** apprezzarlo molto.

   'I believe, your book, 'of'' to appreciate it a lot.'   (Rizzi 1997: 288)

He therefore concludes that that the finite complemetiser (*che*) is in Force° and the non-finite one (*di*) is in Fin °. With a non-split C-system, it is difficult to account for the different structural position of these two Italian complementisers.

Since the Kitharaka complemetiser *ati*, 'that' also occupies a position above left dislocated phrases (see (5) and (3)), I will assume that as the Italian *che*, it is also in force°.

Further arguments in favour of a topic position in the C-system (i.e. between IP and C°) are proposed by Müller and Sternefeld (1993). Consider the sentence below:

(22) John said that [under no circumstances]$_i$ would$_j$ he t$_j$ accept that offer t$_i$.

Assuming that the complementiser *that* is in C°, we are hard pressed to explain what the landing site of the phrase *under no circumstances* and the auxiliary *would* is. Note that the need for a head position as a landing site for *would* is clearly required because monotone decreasing quantifiers such as *under no circumstances* induce subject-auxiliary inversion which is captured through I-C movement. Müller and Sternefeld (1993) therefore propose the existence of a topic phrase (TP), with a head (T) to which the inverted auxiliary moves. The quantifier then moves to Spec TP. This again creates the Spec head configuration which we have argued is necessary for any feature checking, in this case checking of the strong topic feature in T.

I will therefore assume, following Rizzi (1997) that C° a cover term for various components such as Force°, Top°, Foc° and Fin°. In Müller and Sternefeld's analysis, C° selects TopP, suggesting a need for more specifier positions above IP.

4.4   Implications for Kitharaka

In light of the preceding discussion, I will assume that the intermediate strategy provides an example of one of the situations where the topic-focus system is activated. Upon this activation, the wh-phrase moves to Spec FocP and the NP moves to Spec TopP, to check the strong focus and topic feature in Foc° and Top° respectively. The parts I will adopt from Rizzi's representation of the split C-system are therefore force phrase, topic phrase and focus phrase. In the absence of a non-finite complementiser in Kitharaka, I will assume that the fineteness phrase (FinP) is not activated, and therefore it is not projected in the phrasal structure.

A sentence in which the wh-phrase is moved to the intermediate position such as (5a), repeated here as (23) would thus be represented as (24):

(23)   John   a-ug-ir-e   ati   muntu   uju$_j$ **i-mbi$_i$**   t$_j$ a-gur-ir-e t$_i$.
        John   SP-say-T   that   person   this   F-what   SP-buy-T
        'What did John say that this person bought?'

(24)　IP

```
           IP
          /  \
       John   I'
             /  \
           I°    VP
                /  \
              V°    ForceP
              |    /    \
           augire [e]    Force'
                        /    \
                    Force°    TopP
                      |      /    \
                     ati  Muntu uju_i  Top'
                                      /    \
                                   Top°    Foc P
                                          /    \
                                       imbi_j   Foc'
                                               /   \
                                            Foc°    IP
                                                   /  \
                                                 t_i   I'
                                                      /  \
                                                    I°    VP
                                                         /  \
                                                       V°    NP
                                                       |
                                                    agurire  t_j
```
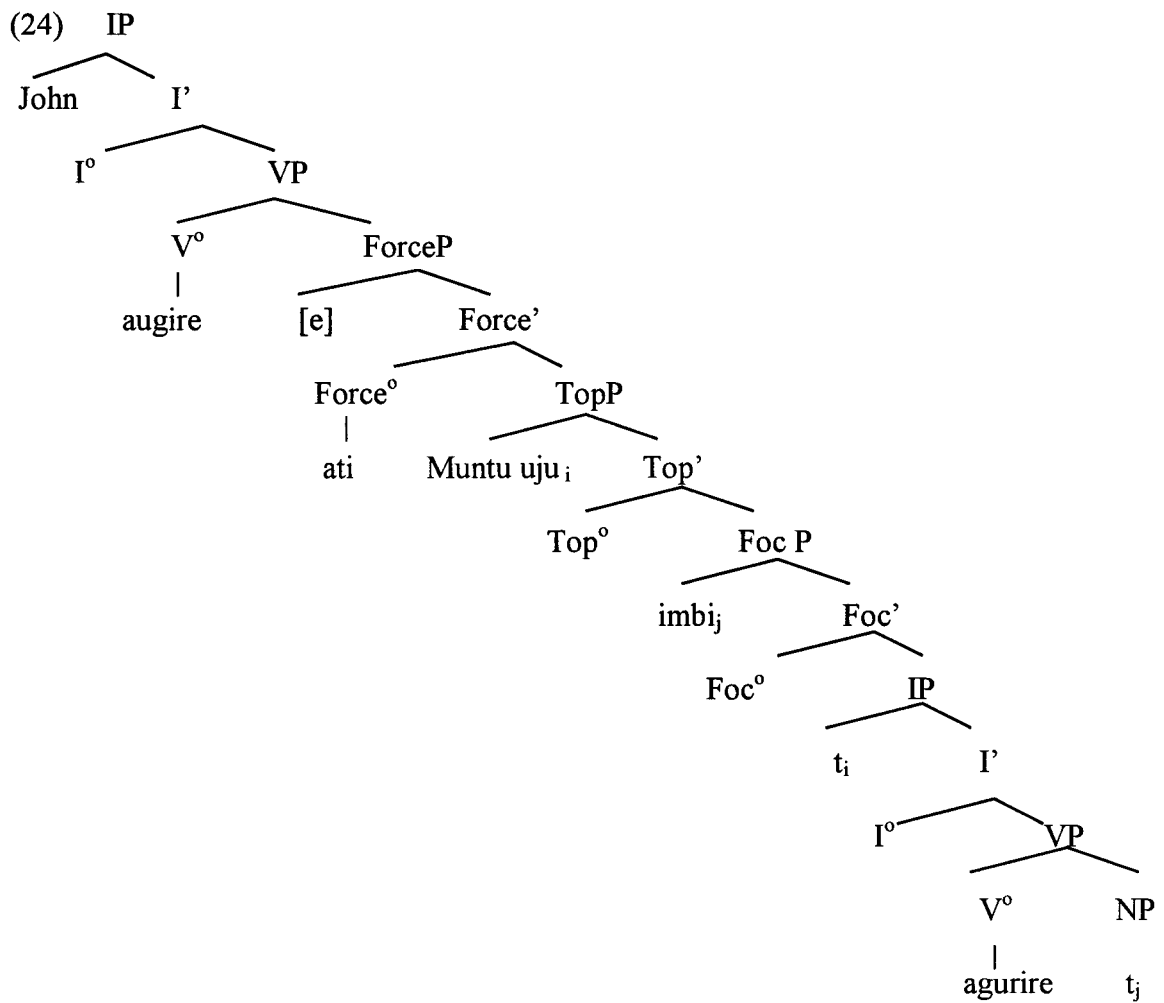
The need for a topic position in the C-system has also been argued for in Colloquial Informal Russian (CIR), a dialect of Russian in which a wh-phrase occurs in the intermediate position. [2]

(25)　Ivan　**kto_i**　　delaet　　t_i?

　　　Ivan　what.Acc　do.3rd pres

　　　'What does Ivan do?

---

[2] This data is quoted in http://www.nyu.edu/gsas/dept/lingu/events/minico02/abstract/scott.pdf.

The argument put forward by Scott (2002) to explain the occurrence of the wh-phrase *kto* between the logical subject and the verb in (25) is that CIR has a topic position adjoined to Spec CP. The wh-phrase therefore remains in Spec CP and the topic *Ivan* moves from the subject position to the topic position adjoined to Spec CP. Although I am not assuming an adjunction analysis for the intermediate strategy, the fact that the wh-phrase adjoins to Spec CP is in itself a way (though indirect) to split the C-system.

Additional evidence for assuming that the wh-phrase moves to a position above IP in the intermediate strategy comes from the observation that the wh-phrase in the intermediate strategy portrays properties of A-bar movement, which in most languages occurs to a position above IP, whereas positions below IP are usually A-positions. I will refer to two crucial tests here, the licensing of parasitic gaps and the licensing of float quantifiers.

Lasnik and Saito (1992) argue that only A-bar movement can license parasitic gaps. They also observe that such licensing occurs if the trace does not c-command the parasitic gap and the A-moved element (in our case the wh-phrase) c-commands the parasitic gap as well as its trace. Following this test, we can conclude that the wh-phrase moves to an A-bar position in the intermediate strategy, as is shown in (26):

(26) Jeremiah **n-ibuku ririku** a-cook-ir-i-e   a-ta-thom-eet-e   [e]?[3]
      Jeremiah F-book   which   SP-return-T-VS-FV   SP-NEG-read-PF-FV
      'Which book did Jeremiah return without reading?

---

[3] The Kitharaka past tense morpheme *ir-* has been infixed on the verb stem ending in the vowel [i] in (26). For a similar argument concerning the infixation of the past tense morpheme in some restricted environments in Kitharaka, see Harford (1997).

Deprez (1994) claims that only overt A-movement can license quantifier float. This test gets confirmation from the observation that passivisation (A-movement) produces an acceptable sentence (27a). In contrast, movement of the wh-phrase to an intermediate position results in an ungrammatical sentence with respect to quantifier float (27b), which supports the conclusion that this is an instance of A-bar movement.

(27) a. Mweere$_i$ u-r-ir-w-e   i-nyoni [$_{QP}$ t$_i$ [$_Q$ gunthe]].
         millet   SP-eat-T-PASS-FV by-birds   all
         'All the millet was eaten by the birds.'

     b. * Nyoni **i-mbi** i-r-ir-e   [$_{QP}$ t$_i$ [$_Q$ gunthe]]?
         birds   F-what   SP-eat-T-FV   all
         'What did the birds eat all?'

4.5   How many landing sites?

From the analysis developed in section 4.3, it follows that the wh-phrase moves to Spec FocP when the topic-focus system is activated in Kitharaka and to Spec CP when the C-system is not split. But are these really two different positions? I will say superficially yes, but as far as the feature checking requirement we have developed is concerned, they are not. The crucial point here is that the assumption is made that the wh-phrase moves to Spec CP when the topic-focus system is not activated, but does this really make any difference especially in light of the fact that the focus phrase is just one phrasal node above IP, just as CP is. Our theory would lose nothing if it is assumed that all wh-phrases in Kitharaka move to Spec FocP, and this is the claim I am making here. Cyclic

movement as in partial wh-movement or long wh-*ex situ* then occurs not through the intermediate Spec CPs, but through intermediate Spec FocPs, the attracting force being the strong focus features in Foc° s. The claim that wh-phrases move to Spec FocP in Kitharaka is also consistent with empirical evidence. Recall my argument in Chapter 2 that the claim that a wh-phrase moves to Spec CP enters into doubt because when an overt complementiser occurs, the wh-phrase occupies a position to its right. This problem is solved by the assumption that the wh-phrase moves to Spec FocP. The conclusion to be drawn is that a non-split C-system can simply be taken to be the focus phrase in Kitharaka. This claim is formally stated in (28) below:

(28)   When the C-system is not split in Kitharaka, Spec CP is equal to (=) Spec FocP.

It could also be assumed that the topic-focus field is always (permanently) activated in Kitharaka, so that whenever there is wh-movement, the wh-phrase moves directly to Spec FocP to check the strong focus feature in Foc°. When there is long wh-movement, the wh-phrase then moves cyclically through all the embedded Spec FocPs to check the strong focus features in Foc° s. The major problem we would be faced with is what to do with the other phrasal projections, force phrase and topic phrase in the absence of any lexical material occupying them. This problem could be solved if we adopt the matching principle of Müller and Sternefeld (1993: 487):

(29)   Matching
       Two functional XPs match iff one immediately dominates the other and at least
       one of the specifier projections is empty.

In the absence of any lexical material, ForceP will match with TopP. Assuming that matching can occur recursively, the result of the matching of ForceP and TopP will also match with the FocP, and what remains at the end is the FocP, the specifier of which wh-phrases occupy.

In conclusion: the wh-phrase moves to Spec FocP in the intermediate strategy to check a strong focus feature in Foc° against that of the wh-phrase. The subject NP (cf. (24)), then moves across the wh-phrase in Spec FocP to Spec TopP where it checks the strong topic feature in Top°. Importantly, what might appear as different landing sites for a Kitharaka wh-phrase (Spec CP and Spec FocP) is in principle one and the same position. Empirical evidence however favours the use of the latter term (Spec FocP) and the consequent assumption that wh-phrases move uniformly to this specifier position, whether in wh-ex *situ*, partial wh-movement or the intermediate strategy, which is theoretically more attractive given that the trigger for wh-movement in Kitharaka is a strong focus feature.

CHAPTER 5:   SUMMARY AND THEORETICAL IMPLICATIONS

In this final chapter, I provide a summary of the major observations arrived at in the course of this research. Thereafter, I will give the implications of my research on the syntax of wh-questions, especially with respect to analysis of wh-questions in Bantu languages.

In this research, I have examined different strategies of question-formation in Kitharaka. Four main question-formation strategies have been discussed, namely wh-*ex situ*, wh-*in situ*, partial wh-movement and the intermediate strategy.

With wh-*ex situ* and partial wh-movement, I have argued that in the absence of an overt complementiser in C°, it could be assumed that the wh-phrase moves to Spec CP. Notwithstanding, I have showed that this position (Spec CP) is in principle not different from Spec FocP, because both of them are one phrasal node above IP. Preference for the use of a uniform Spec FocP as the only landing site for moved wh-phrases in Kitharaka is derived from the observation that when a moved wh-phrase and a complementiser are realized in the same clause, the wh-phrase occurs slightly below the complementiser, a position which we have assumed is Spec FocP from the analysis of the intermediate strategy. The other point in favour of the latter specifier position is that a wh-phrase in Kitharaka moves to check a strong focus feature, which is logically more amenable to Spec FocP. On the assumption that the topic-focus system is permanently activated in Kitharaka, I have argued that it could be assumed that the phrasal projections ForceP,

TopP and focus phrase merge in a recursive manner (due to the matching principle of Muller and Sternefeld 1993), so that what we have at the end is one specifier position above IP, Spec FocP, as the landing site for the wh-phrase in wh-ex *situ* partial wh-movement, and the intermediate strategy.
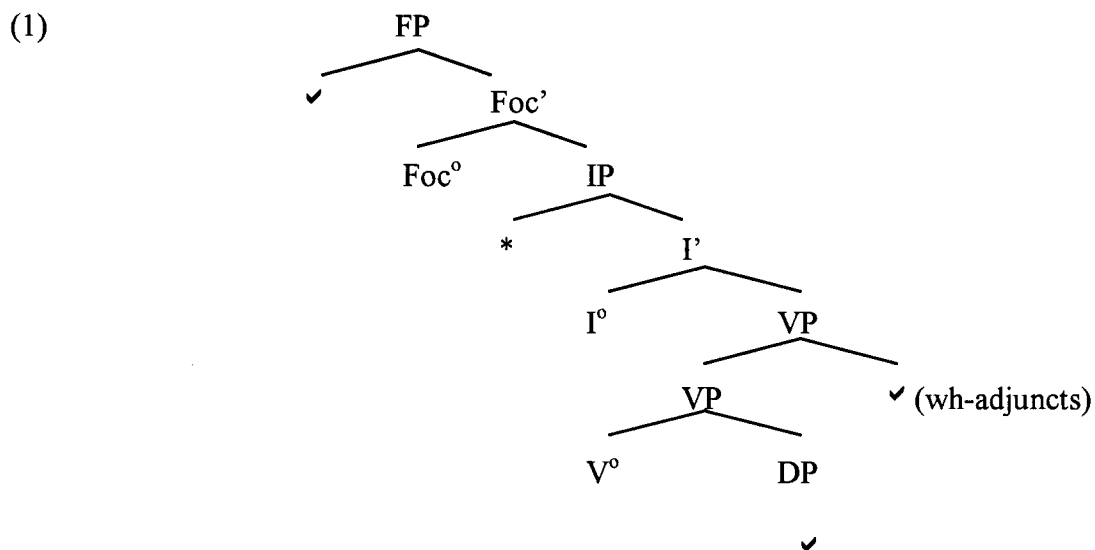
For wh-*in situ*, I have shown that this strategy is only fully acceptable within VP and only for wh-objects and Class A wh-adjuncts. No wh-phrase can be found in Spec IP.

Finally, with the intermediate strategy, I have argued, following ideas of Rizzi (1997) that when the topic-focus system is activated in Kitharaka, the C-system is split into the phrasal categories ForceP, TopP and FocP. Each of these phrasal categories has a head and a specifier position. The wh-phrase moves into Spec FocP which is one phrasal node above IP and the topicalised NP moves across the wh-phrase to Spec TopP. If we assume again that the topic-focus system is permanently activated in Kitharaka, FocP and TopP will have to match and therefore merge (giving rise to TopP) when there is no overt complementiser in force^o.

Wh-phrases in Kitharaka can therefore be found in two major syntactic positions:

- Inside the verb phrase (only with wh-objects and Class A wh-adjuncts when wh-*in situ* strategy is used).
- In Spec FocP (for the intermediate strategy, partial wh-movement and wh-*ex situ*).

The possible structural positions that a wh-phrase can occupy in Kitharaka are shown in (1):

(1)

```
                          FP
                    _____/_____
                   ✔            Foc'
                          _____/_____
                        Foc°            IP
                                  _____/_____
                                 *             I'
                                        _____/_____
                                       I°             VP
                                                _____/_____
                                              VP            ✔ (wh-adjuncts)
                                        _____/_____
                                      V°            DP
                                                     ✔
```

The analysis developed in this research has a lot of implications for future research on question-formation especially in Bantu languages. If a focus feature-based approach to wh-questions can be maintained, then the claim that Bantu languages do not form questions by movement (see Bergvall 1987, Harford 1997), but use cleft constructions needs to be closely re-investigated. What is actually assumed to be a copula verb (Zeller and Sabel 2002), predicative (Harford 1997), or assertive marker (Bergvall 1987) might on closer investigation turn out to be a focus marker which triggers movement to the left periphery. As an example, I will examine Bergvall's analysis of focalized constructions in Kikuyu (a Kenyan language which is closely related to Kitharaka) to show some problems with adoption of a cleft analysis to wh-questions in Kitharaka.
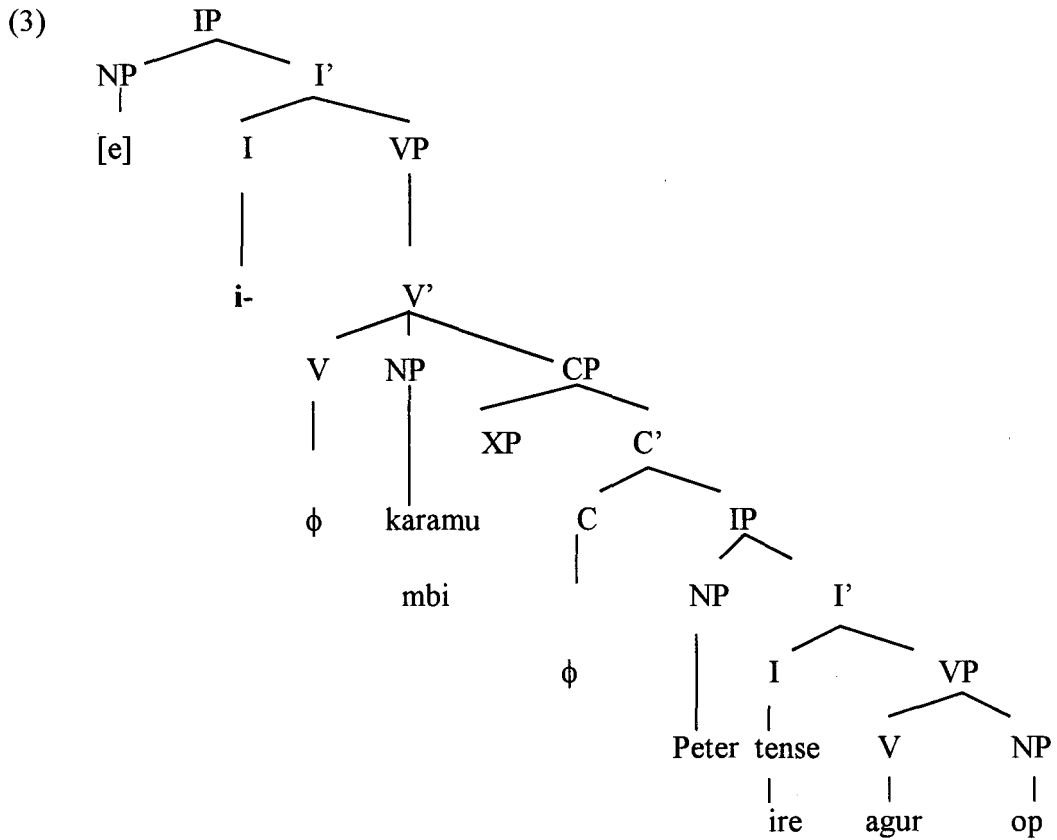
I have already shown that Kitharaka has two focus markers *n-* and *i-* whose occurrence is morphologically determined. The focus marker *n-* appears before NPs and wh-phrases beginning with vowels and *i-* occurs before wh-phrases and NPs beginning with consonants. The Kikuyu focus particle is *ne* (Clements 1984). Bergvall calls it an *assertive marker*. I will, for the sake of consistency, continue to use the term focus marker/ particle.

Bergvall (1987) proposes that the Kikuyu focus particle *ne* is base generated and remains in INFL.[1] From his INFL base-generation approach to *ne*, Bergvall claims that all focus-bearing constructions in Kikuyu are bi-clausal constructions. She further argues that *ne* does not have any inherent focal ability; rather its focal nature (assertiveness) derives from the position it occupies in a cleft. Adopting Bergvall's analysis for Kitharaka, sentences with a focalized NP/wh-phrase such as (2a, b) would have to be represented structurally as in (3):

(2)   a. I-karamu   Peter   a-gur-ir-e t
           F-pen   Peter   SP-buy-T-FV
          'It is a pen that Peter bought.

    b. I-mbi   Peter   a-gur-ir-e t?
        F-what Peter   SP-buy-T-FV
        'What did Peter buy?'

---

[1] See Clements (1984) for an opposing view where the Kikuyu focus particle is generated under Comp which is immediately dominated by S' (= CP).

(3)

```
                    IP
              NP          I'
              |
             [e]     I        VP
                     |         |
                     i-        V'
                          V   NP        CP
                          |   |      XP        C'
                          φ  karamu          C       IP
                             mbi            |      NP      I'
                                            φ      |    I        VP
                                                 Peter tense   V      NP
                                                    |      |    |       |
                                                   ire   agur   op
```

In such cleft constructions, Spec IP is occupied by an empty pleonastic subject (Bergvall 1987), and this shows that it is a non-θ position. A similar pattern is also observed in English where Spec IP cannot be occupied by a θ-marked NP in equivalent cleft constructions, (cf. 4a vs 4b). Only the expletive *it* is allowed.

(4) a. * Peter is what that he bought?
     b. It is what that Peter bought?

A problem for the cleft analysis developed by Bergvall is posed by the intermediate strategy, (5):

(5)   a. Nazario **i-mbi**   a-gur-ir-e t?
          Nazario F-what   SP-buy-T-FV
          'What did Nazario buy?'

        b. Nazario **i-karamu** a-gur-ir-e.
          Nazario F-pen   SP-buy-T-FV
          'It is a pen that Nazario bought.'

Assuming ignorance of the analysis developed for the intermediate strategy, the subject position in (5) seems occupied by an overt NP, *Nazario*, which bears the agent θ-role. We therefore do not get a position for the empty pleonastic subject that Bergvall's analysis predicts to occur in cleft constructions. Furthermore, even if we were to adopt the analysis developed for the intermediate strategy in Chapter 4, movement of the subject NP to Spec TopP would still leave a trace in Spec IP, again leaving no position for the pleonastic subject.

With a focus-feature approach to wh-movement such a problem disappears at once. The wh-phrase in (5) moves to Spec FocP to check a strong focus feature in the Foc^o as well as the feature in the wh-phrase, and the logical subject undergoes topicalisation to check the strong topic feature in Top^o which is located above FocP (for details see Chapter 4).

I suggest the following unresolved issues as topics for future research, in addition to the issues noted at the end of Chapter 2:

- Do any Bantu languages form questions by use of clefts? There is actually need to investigate the plausibility of the cleft analysis to Bantu wh-questions, as a feature-based analysis seems to provide a rather uniform and empirically attractive/motivated approach.

- I have assumed in this research that a wh-phrase combines with the focus particle, which I argued to be a reflex of focus features. The interesting question here is: does the wh-phrase combine with the focus particle in the syntax or is this combination lexicalised?

- There is a group of constructions that allow phrases to remain *in situ* even when they bear the focus particle. Consider (6) below:

(6)　　a. Pius　i-mwarimu.
　　　　　Pius　F-teacher
　　　　　'Pius is a teacher'

　　　　b. Pius　n-obisa
　　　　　Pius　F-obisa
　　　　　'Pius is an officer.'

From (6) above, we can form the wh-question shown in (7):

(7)　　Pius　n-uu?
　　　　Pius　F-who
　　　　'Pius is who?'　(I do not want to change the word order)

The crucial point here is, are these phrases really in the *in situ* position as it superficially appears or this is another form of the intermediate strategy with

movement of the wh-phrase and the NPs to Spec FocP, and the subject (topic) to Spec TopP? One could also ask: is the particle *n-* in (7) really the genuine focus particle which I have assumed triggers wh-movement in Kitharaka, or it is another element. For example, does the particle realise a predicative head whose function is to create an unsaturated proposition *n-uu*, which is then predicated of an external argument, *Pius* (cf. Bowers 1993).

I conclude this research with the observation that the position in which a wh-phrase ends in Kitharaka depends on the nature of the focus feature that is picked from the lexicon. When the strong focus feature is selected, wh-movement occurs leading to wh-*ex situ*, partial wh-movement or the intermediate strategy. The target landing site in all these cases is *Spec FocP* and the strong focus feature triggering movement is in Foc°(s). The selection of the weak focus feature results in wh-*in situ*. A wh-feature is always weak in Kitharaka, otherwise partial wh-movement and the intermediate strategy would not be possible.

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