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inside back cover
THE S-AUX-O-V-OTHER SYNTAGM IN ATLANTIC*

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As the largest language phylum in the world and the most geographically widespread (Williamson & Blench 2000), Niger-Congo understandably exhibits some variation at all grammatical levels. Basic word order stands as no exception to this generalization, and there have been partisans for both an SOV and an SVO reconstructed word order. Gensler 1994 attempts to reconcile the two by claiming that neither proposal is correct; he suggests that both SOV and SVO are derived from Proto-Niger-Congo *S-AUX-O-V-Other. Because of the pattern’s “quirkiness” (being found virtually nowhere else in the world) and because it is so widely attested in geographically widely separated Niger-Congo languages, the pattern should be reconstructed for all of Niger-Congo. One crucial piece of evidence for this claim comes from the Southern Atlantic language Kisi. This paper explores Kisi’s facts in further detail to show how central the structure is to the language. It then expands the investigation to other languages of Atlantic, finding that the pattern is much more widely attested than was previously realized, albeit in an attenuated form. The paper concludes by discussing the significance of the Atlantic facts to Niger-Congo in general.

1. Introduction.

A number of typologically and genetically unusual structures appear in Kisi, a language belonging to the Southern Branch of Atlantic. The morphosyntactic

* My thanks to the editor and two SAL referees who wished not to remain anonymous, John V. Singler and Orin Gensler, for helping to vastly improve this paper. They are not, of course, to held responsible for ways in which I may have not followed their advice. Abbreviations used in this paper are listed at the end of the article.
structures common to Niger-Congo are found in Kisi, noun classes and verb extensions; these expected parallels, noted explicitly in Mukarovsky (1958) (following Westermann 1925, 1927), beguiled the former into claiming a genetic relationship between Kisi and Bantu, much closer than that achieved by common membership in Niger-Congo. To be fair, the unexpected patterns treated here may not have appeared in the incomplete data Mukarovsky considered when he made this claim (he had only the field notes of an American anthropologist (Earthly, n.d.) to work with.). One of these unusual structures is the topic of this paper, the syntagm S-AUX-O-V-Other, the “split” or “distributed” predicate.

At the joint WOCAL/ACAL conference in 2003, a workshop was devoted to discussing what was there grandiloquently called “distributed predicate syntax”, but here takes the prosaic form of S-AUX-O-V-Other. The word “distributed” may require some explanation, but first the preliminary definitions in (1).

(1) **Preliminary definitions** (Gensler & Güldemann 2003)

AUX a closed class of elements expressing inflectional categories to possibly include: Tense, Aspect, Mood, Negation

V an open class of elements expressing typical verbal semantics (activities, processes, states, etc.) [the lexical verb]¹

O a single object [see the qualifications below]

Other² all other sentence augments and adjuncts except S, O

Gensler’s talk at the workshop began by renaming “distributed” “split”, and thus a section of his talk dealt with “split predication”. As he pointed out, there are many more possible splits. The most obvious is what he called the “syntagmatic” split between the auxiliary and the verb, but there are others, as in (2).

(2) **“Split” syntax: S-AUX-O-V-Other** (Gensler & Güldemann 2003)

1. Syntagmatic split:
   a. S-AUX-O-Verb-Other (split predicational nucleus = \{AUX, V\})
   b. S-AUX-O-Verb-Other (split set of verbal actants = \{O, Other\})

2. Paradigmatic split: “Split in the sense of possible co-occurrence with other construction types, notably, S-(AUX)-V-O (as in ‘split ergativity’)”

¹ The material in square brackets is my own and is meant as a heuristic aid.

² The discussion of “Other” does not form part of this paper except with regard to Kisi, primarily because there is so little information in the available sources.
In Gensler's senses of 'split', then, the language of focus, Kisi, is trebly split, in all the ways given in (2). Along with the first two splits, Kisi features an alternation between S-V-O and S-AUX-O-V word order.

This paper begins by presenting a full characterization of the latter pattern in Kisi, expanding on and updating the original presentation in Childs (1995), as well as squaring it with other patterns in the language. The next step is to look at other Atlantic languages, making reference to what might be called an areal explanation. This explanation proceeds from the contention that the source for this anomalous structure is the Mande languages with which Kisi speakers have been in long and continuous contact (Childs 2002), a superficially plausible explanation, as outlined in the next paragraphs.

Within Niger-Congo, the sub-phyla Kordofanian, Atlantic, Gur, Kru, Kwa, and Benue-Congo are said to be SVO and only Mande is consistently "SMOV" ["M" = "Aux", roughly speaking] (Williamson & Blench 2000: 39). Thus, Kisi is exceptional with regard to Atlantic and most of the other Niger-Congo phyla. Its widespread S-AUX-O-V-Other word order, however, follows the overwhelmingly consistent pattern in Mande, by whose languages Kisi's speakers are completely surrounded; thus, an areal explanation immediately suggests itself. In Map 1 one can see just how surrounded they are: the Mande languages encircling the Kisi area are preceded with a circled asterisk. One Mande language, Lele, actually shares part of the (northwest) Kisi area.

Kisi has, in fact, a long history of contact with a number of Mande languages; Mande speakers have surrounded, infiltrated, and dominated the Kisi before and ever since the "Mane" invasions of the 16th century (Rodney 1967). Thus, the sociohistorical conditions are right, and the Mande languages with which Kisi has been in contact all have the S-AUX-O-V-Other pattern. Childs (2003b) suggests that this pattern does show some areal distribution in West Africa, as first postulated for other structures in Heine & Reh (1984).

However, after looking at the languages within Atlantic, that claim must be abandoned, or at least weakened. One reason is that the structure is more widespread in Atlantic than originally thought. This is the conclusion of the survey in sections 2.1 and 2.2. Languages in the southern and northern branches of Atlantic both exhibit the structure, as well as the isolate Bijogo. Secondly, the structure does not appear in circumstances where it might be expected to appear, if the areal explanation were to be valid. Not only is the structure absent in those Atlantic languages which are profoundly influenced by Mande languages, but it is also present in languages uninfluenced by Mande.
Another reason for rejecting the areal explanation is historical. The Kisi have been surrounded by the Mande only in relatively recent times; the real dominance by Mande speakers took place in the final days of the Mali Empire (16th century on). Finally, as seen in section 2, the structure is deeply embedded in the grammar and quite productive. With all of these facts in mind, it now seems
as if only a genetic explanation accounts for what is found in Atlantic, although an areal explanation may be invoked elsewhere in Niger-Congo.³

Map 2: Geographical location of the Atlantic languages

³ Note that the Fulfulde-speaking territory ("Fula" on the map) extends much further to the east than can be shown on the map.
The Atlantic Group consists of some fifty languages, many of them well known, e.g., Wolof and Fulfulde, but the majority of them much less widely spoken and threatened by more widely spoken languages, both from within and outside Atlantic. The language group is found in a broad swath along the Atlantic coast from Senegal to Liberia, roughly speaking, and consists of two disparate branches and an isolate. Map 2 shows the Atlantic languages, all but Wolof and Fulfulde with cross-hatching, in a map adapted from Wilson (1989). The Mande languages fill in the rest of the area, and their names are given in parentheses where indicated.

In a paper given at the 31st Colloquium on African Languages and Linguistics (Childs 2001), I raised the question as to why linguists persist in seeing Atlantic as constituting a genetic entity, presumably on a par with other genetic groups within Niger-Congo such as Mande, the group with which it has an ongoing and often intimate relationship (Childs 2000, 2004). In that same paper I tried to show that although the grouping may serve an important referential function, it has no other validity except as an interesting historical object. This claim was not new. As noted many times before, e.g., Wilson (1963), the main reasons for seeing the Atlantic languages as a unity, aside from the typological reasons given above, are that they are not Mande and they are not close to anything else. Nonetheless, the grouping serves as a useful heuristic and will be considered appropriate for the discussion which follows.

With this remark as a caveat, we will proceed. The generally agreed-upon classification of Atlantic appears in Table 1. Languages that appear in boldface are those in which the S-AUX-O-V structure appears (n=13); languages underlined are those in which it does not appear (n=5). Unaltered language names are languages for which the question cannot be answered on the basis of available evidence.
Table 1  The Atlantic languages classified

I. Northern Branch (n=34)
   A. Senegambian languages
      1. Fulfulde, Seereer
      2. Wolof
   B. Cangin: Lehar, Safen, Noon; Ndut, Palor
   C. Bak
      1. Diola
         (1) Bayot-Essin
         (2) Diola Proper
            (a) Karon, Kwatay
            (b) Diola-Fogny, Gusilay, Kasa
            (c) Ediamat, Mlomp, Her
      2. Manjaku, Mankanya, Papel
      3. Balanta
   D. Eastern Senegal-Guinea
      1. Tanda: Onian, Wamei
      2. Biafada, Badyara
      3. Buy, Kasanga; Bainouk
   E. Nalu: Nalu, Pukur

II. Bijogo

III. Southern Branch
   A. Mel languages
      1. Temne; Baga Maduri, Baga Tjiitem, Lọnitʃ, Baga Koba, Landoma
      2. Bulom languages: Kisi; Mani, Sherbro, Krim, Bom
      3. Gola
   B. Limba

2. Analysis.

This section begins by laying out the facts in Kisi, a language used in the proposal found in Gensler (1994) for reconstructing S-AUX-O-V-Other. I then look a little deeper into the Kisi facts to see if there are synchronic traces of an evolutionary cline, fossilized constructions or remnants, in the manner of Greenberg’s “processual comparison” (e.g., Greenberg 1969). The point of this analysis is to discover where the structure came from and/or where it is going. Internally no obvious
trend can be found, but a comparison with other languages shows the pattern to be quite attenuated outside Kisi in different ways in different languages, just as would be expected with an old, well-established structure.

It was originally assumed that the syntagm represented an innovation, possibly an effect of contact with surrounding Mande languages, since much else seems to be borrowed into Kisi (Childs 2002). It turns out that there are parallels, however, to the structure in other nearby related languages, both ones subject to Mande influence, but also ones not subject to such influence. Beyond Kisi’s closest relatives the same findings occur, counterevidence to the areal explanation.

Before turning to the facts of Kisi, I need to remark that only one Southern Branch language out of those with grammars extensive enough to qualify for inspection did not have the structure, Baga Tsjitem of the Baga cluster.

S-AUX-O-V-Other in Kisi. This section discusses examples of the S-AUX-O-V-Other syntagm in Kisi. The first pair of examples features clauses with simple verbs, where objects follow verbs.

(3) S V O S V O O
kèùwó lòwá sàá ò ké yá tôòlúláŋ
snake bite Saa she give me support
‘The snake bit Saa.’ ‘She gave me support.’

The examples in (4) show the S-AUX-O-V-OTHER syntagm with compound verbs, i.e., verbs with an auxiliary (as opposed to those in (3)). The two sentences (4a) have a single object, and the next two sentences (4b) have double objects.

(4) Clauses with compound verbs: The S-AUX-O-V-OTHER syntagm
a. S AUX O V
fàlà có lèéŋno yàkpaá ñ có bèlõ̀ŋ còùwià
Fallah PROG machete sharpen we PROG palm-nuts pick
‘Fallah is sharpening the machete.’ ‘We are picking the palm nuts.’

b. S AUX O O V
à wá ndú kòówàŋ kìóó
they PROG.PAST him medicine give
‘They were giving him medicine.’
The examples in (5) illustrate some of the “Other’s” prepositional phrases after the lexical verb in (5a) and (5b), a non-object nominal argument with no adposition in (5c); and finally in (5d) another adpositional phrase.

(5) “Other” in Kisi

a. à cò bàlô ñ yêélâñ
   they PROG surround with weeping
   ‘They go around weeping.’

b. à cò cuûndôñ lé wâltâ ndâlêñ
   they PROG praise for work their
   ‘They will praise themselves for their work.’

c. à cò diûnôñ kûndâñ
   they PROG gather group
   ‘They will gather together in a group.’

d. à cò ndû hiwîðô ó nêì
   they PROG him accompany to road
   ‘They are accompanying him on the road.’

Although such structures are not common, when a two-argument verb is marked with a valence-increasing extension such as the Benefactive, three arguments can appear between the auxiliary and the verb. I was not able to find such an example with one of the two true auxiliaries, but I did find one with what I call below an “incipient auxiliary”, the word for ‘go’.

(6) Three objects preceding an (extended) verb

ò kùè yâ fâlâ màlôñ kellô
he go me Fallah rice give.BEN
‘He’s gone to offer rice to Fallah for me.’

4 The word “incipient” is used in the sense of, e.g., Heine (1993).
The likelihood that three arguments are allowed with true auxiliaries is strengthened by the examples in (7). In each sentence the benefactee *ndú* ‘him’, the additional argument allowed by the verb extension, appears inside, between the auxiliary and the verb.

(7) Arguments before extended verbs

a. ̀cọ̀ cọ̀ ndú yòmndó hììlùlló  ‘He’s shaking the tree for him.’
   he  PROG him tree shake.BEN

b. à cọ̀ òbà ndú diòmndó hììwìlló ‘They are interpreting for him.’
   they  PROG him word translate.BEN

Thus, we have seen that only arguments without an adposition are allowed in the split slot. When a noun is accompanied by an adposition it appears after the verb, as in (8). (Also consider the examples in (5).)

(8) ̀pòò cọ̀ hëŋgụ̈ndó á lànò píláá
   man  PROG boast to woman someone
   ‘The man is boasting to someone’s wife.’

It is not an absolute prohibition that only unaccompanied NPs can occur within the split predicate, but rather a (statistical) generalization, for there are several other elements that can appear in the slot, most of them particle-like words with meanings close to those often conveyed by inflections, as seen in (9). For example, the word for ‘now’ in the first sentence conveys a perfect meaning when used with the simple verb forms (see the discussion following example (10)).

(9) Other material within the split predicate

ò cọ̀ nị̀ţ yá màlọ́ŋ hùŋgùlló
   he  PROG now me rice beat.BEN
   ‘He is beating (my) rice for me.’

ò cọ̀ lè hà̀ù kẹ̀nọ̀ fẹ̀ŋ màlàn wà̀nà cèlèŋ sòlá
   he  PROG POL today give-MID first before person other get
   ‘Let him give [it] to himself today first before another person gets [it].’
Time words such as hàù ‘today’ can appear both within — (10a) — and after the split predicate — (10b). Such words, as opposed to objects, are only optionally present within the split predicate.

(10) **Variable syntax: Material within and without the split predicate**

a. sókóó cò hàù húnòò
   herbalist PROG today come
   ‘The herbalist is coming today.’

b. ñi cò lákò hàù yêndêmàë
   we PROG go today town
   ‘We will be going to Yendema today.’

mìàllá cò yá hinùlló hàù
strangers PROG me come today
‘Strangers will be coming to me today.’

Thus, a number of elements other than nominal arguments can appear within split predicate constructions. Based on their semantics and their reduced phonological status, such words are “incipient verbal markers”, waiting to cliticize leftwards and become (phonologically) part of INFL. Particles such as nîñ, conveying ‘perfectivity’, the politeness particle ë, and the question particle yè are clearly phonologically part of words to their left, as discussed in Childs (1995). The other candidate examples are all time words, another category typi-

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5 The town name yêndêmàë has no preposition, following a general prohibition against prepositions before place names. The fact that it cannot appear within the split predicate, despite the fact that it is a nominal argument without a preposition, is likely due to another prohibition against locatives appearing in this environment (see the discussion around example (11)).
cally marking on verbs crosslinguistically, but not a distinction robustly marked in Kisi, which usually marks only mood and aspect on verbs. Thus, such words could be expanding the set of inflectional contrasts to include more tense distinctions.

It should be noted that locatives are not possible within split predicates, as they are in a few other Atlantic languages, Kru and in some Bantu languages (Chaga, Kinyarwanda) as object pronoun infixes, despite the fact that many are unmarked by an adposition. In Kisi neither locatives nor proper place names are accompanied by an adposition.

(11) **Locative arguments not considered objects in Kisi**

\begin{align*}
\text{í có làkò fòóyá} & \quad \text{‘I am going to Foya.’} \\
I \text{ PROG go Foya} & \\
*\text{í có fòóyá làkò} & \quad \text{‘I am going to Foya.’} \\
I \text{ PROG Foya go} & 
\end{align*}

Note how this stands in sharp contrast to the plethora of temporal expressions Kisi allows in the same position.

The next point to be made is that the structure is widespread and productive in Kisi. This is shown in two ways: first of all, by the fact that “incipient” auxiliary verbs follow the same pattern of S-AUX-O-V-Other; secondly, by the fact that the structure is found in embedded clauses and in other sentence types.

**“Incipient” auxiliary verbs.** In Kisi several otherwise normal (lexical) verbs function identically to auxiliaries. Syntactically, they cause the same inversion of object(s) and verb as do true auxiliaries. When this inversion occurs, (non-subject) arguments must occur between the auxiliary and verb, and the verbs themselves follow in their non-finite forms, just as with true auxiliaries. Semantically these incipient auxiliaries signal distinctions comparable to inflectional ones but still retain some of their lexical meaning. These verbs otherwise display full verbal syntax and morphology. One such verb is cii ‘finish’, conveying a ‘completive’ meaning (cf. Welmers 1973). Note how in (12) the objects, yòmndè in (12a) and fòndàŋndàŋ in (12b), appear before the non-finite verb forms, lòmòò and hèwì, and after the incipient auxiliary, just as would objects with a fully qualified auxiliary.
(12) **Compleitive cii ‘finish’**

a. ɵ cii yəmndé lómò múééŋ
   he finish wood burn IDPH
   ‘He finished burning the wood completely.’

b. ɵ cii fóndâŋndáŋ hêwì
   he finish spaces occupy
   ‘He occupied the (empty) spaces.’

The verb cii is in the same position with the same syntax as the auxiliaries co and wa. The change from a verb to an auxiliary is common in African languages, particularly with regard to a verb meaning ‘finish’ (Heine & Reh 1984: 38). A “desemanticized” ‘finish’ is commonly reduced to an aspect marker, e.g., -isha in Swahili; feni in Liberian English (from English finish (Singler 1999)).

The verb ‘have’ has a modal meaning, expressing obligation, as illustrated in (13).

(13) tàànîláŋ ndáŋ lá nó wànà súéí cùwò ni
   bonds these PRO have people palaver bring FOC
   ‘It is these commitments that cause trouble between people.’

   ó kòlółáŋ ndáŋ nìŋ ndá nò jà yèŋûlló ni
   to drinking this in they have you harm FOC
   ‘Your involvement in drinking means they will harm you.’

Some examples of verbs that form part of the tense-aspect-mood system of Kisi are given in (14). In both cases the verb and its object replicate the OV word order followed by more established auxiliaries.

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6 The word is used here in the sense of grammaticalization theory, e.g., Heine et al. (1991).
(14) *Continuative lo ‘stay, continue’*

í ló kísie péèkùò háà mí cáà
I stay Kisi study until CONJ.1SG know
‘I continued to study Kisi until I learned how [to speak it].’

ò cò hùnòc cíóña tòòfìà
he PROG come towns look.at
‘He will (come) inspect the towns.’

Examples in (15) show verbs with only their core meaning (less desemanticized), which follow the same syntactic pattern, the verbs ‘fail’ in the first sentence and ‘hurry’ in the second.

(15) ò dèmáal sáà wàlló tösał kpòñ
he fail Saa work do IDPH
‘He failed completely to do the work for Saa.’

yòñ wòñndó kélëngá ndú yùùwiì ní
happen bad hurry him be.old.cs.PL FOC
‘Disreputable activities made him age prematurely.’

In all cases these incipient auxiliaries take the same syntax as true auxiliaries. The S-AUX-O-V-Other pattern appears widely even in less grammaticized constructions, comparable to the constructions with real auxiliaries. The pattern is also found in relative clauses, just as in main clauses, as well as in questions and focus constructions, as seen in the following section. Its presence attests further to the importance of the structure.

**Alternate word order in other environments.** Both word orders (S-V-O and S-AUX-O-V) are found in relative clauses, which have been bracketed in the examples. Example (16a) features the Aux-less construction and (16b) shows a relative clause with the auxiliary *co*. The pronouns *kòñ ‘that’* (16a) and *hòò ‘this’* (16b) are optional resumptive pronouns, which behave just as would any other pronoun in a similar environment.
(16) Both orders found in relative clauses

a. \[ S \ V \ O \ O \]
\[ fəfələ [s ndə fəfələl yá kόŋ]-o kpouu à sòlə lë \]
struggle[ they struggle me that]-REL all they get NEG
‘Despite all that struggling that they went through for me, they got nothing out of it.’

b. \[ S \ AUX \ O \ V \]
\[ wəli [s j có hōo tòsə]-o təmbə ndōo kέ núm tòólúləŋ \]
work [ you PROG this do]-REL Tamba he-IMPF give you support
‘Did Tamba give you any help with this job that you are doing?’

The same split occurs in other sentence types with non-basic word order: focus constructions and wh-questions. To the left appear the examples of S-AUX-O-V in non-basic sentences; to the right are S-O-V versions of the same sentences, i.e., without an auxiliary. The two examples in (17) feature focus constructions; the examples in (17b) show two wh-questions. In the first of the two focus examples in (17a) the verb ‘get’ (sòlì) remains in situ because it is the ‘sobbing’ (hìlìá) that is focused; in the second the verb (fëféliáá) is fronted, as it is the item focused, and thus sentence order is V-S-Aux-O on the surface.

(17) Split word order in non-basic sentences: wh-questions and focus constructions

a. \[ S \ AUX \ O \ V \]
\[ bàà hìlìá có núm sòlì lènŋ ní \]
whether crying PROG you get inside FOC
‘Is it sobbing that will save you from it?’

~ hìlìá sòlì núm
‘Sobbing saves you.’

V \[ S \ AUX \ O \]
\[ fëféliáá ó có bùŋgàŋ mùŋ ní \]
lingering he PROG portions those FOC
‘He’s sticking around for those portions.’

~ ò fëféliáá bùŋgàŋ mùŋ
‘He stays around for those portions.’
b. $S \quad AUX \quad O \quad V$

\begin{align*}
něěné \quad &c\quad yè \quad mómóó \quad yàù \quad \sim \quad něěné \quad yàù \quad yè \quad mómóó \\
\text{who} \quad &\text{PROG} \quad Q \quad \text{rice} \quad \text{cook} \quad \text{‘Who is cooking the rice?’}
\end{align*}

\begin{align*}
lóó-kùùù \quad &j\quad c\quad yè \quad wàlló \quad òòà \quad \sim \quad lóókùùù \quad ñ\quad òòà \quad yè \quad wàlló \\
\text{time-where} \quad &\text{you} \quad \text{PROG} \quad Q \quad \text{work} \quad \text{do} \quad \text{‘When are you doing the work?’}
\end{align*}

In summary, we see that the “splits” are robustly attested in Kisi. Furthermore, the Kisi evidence furnishes strong support for the idea of the S-AUX-O-V-Other syntagm providing a template for “renewal”, as argued in Gensler (1994). Incipient auxiliaries easily slot into the position occupied by more prototypical auxiliaries. No other Atlantic language, however, exhibits such robustness in the structure. In the languages discussed below, the distribution of the construction is restricted in some way, and sometimes variable. I first turn to exemplification in other Southern Branch languages and then to the rest of Atlantic.

Two points need to be made before entering the discussion of other Atlantic languages. The first involves an assumption, namely, that morpheme order within a word in one language can be compared to the syntax-level ordering of morphemes in another language where the morphemes are free words, (see Givón 1971). I have made this assumption primarily because many sources are not explicit or are unclear about how or sometimes even where word divisions have been made. In some languages different sources may not conform to each other. To treat only syntactic order would severely compromise the task, despite the potential mismatches between the morphology and syntax. The second prefatory remark is less controversial. For other Atlantic languages “Other” will not be discussed (for reasons given in note 2.) and reference will be made to S-AUX-O-V as the relevant syntagm.

2.1 S-AUX-O-V elsewhere in the Southern Branch. We have seen in Kisi how the word order alternation, the paradigmatic “split” in (2), depends on whether the verb involves an auxiliary, and moreover involves both nouns and pronouns; elsewhere in Atlantic it is only pronouns, with several exceptions, that feature the S-AUX-O-V order. Furthermore, there is variation on whether all pronouns participate, on whether all auxiliaries condition the shift, and whether auxiliaries are
even needed at all. The reader may want to refer back to Map 2 and Table 1 during the following discussion.

**Mani.** The first language is Mani, a language spoken today far away from Kisi in the Samou region of the Guinea and Sierra Leone coasts. It is genetically close to Kisi (both are in the Mel subgroup) and is heavily influenced by Mande, specifically by Soso in Guinea, the language which virtually all ethnic Mani speak, although some ethnic Mani have switched to Temne (Childs, to appear). Thus, if Mande influence were the crucial factor one would expect the structural split to be even more robustly attested than in Kisi.

Exact parallels to Kisi structures do not exist, as revealed in recent fieldwork (2000, 2004) and in the limited literature (Moity 1948, 1957, Mukarovsky 1966), despite the (linguistic) closeness of the two languages. Nonetheless, there are some examples of object pronouns before the lexical verb. In the first example (18a), the object pronoun *mì* appears before the verb *sònè*, and in (18b) the object pronoun *hìn* appears before the lexical verb *kámátil* and after the auxiliary *lè*. At this point it is uncertain how widespread the phenomenon is; what is certain is that it is no where near as common as in Kisi.

(18) *Pronouns before the lexical verb in Mani*

a. *ránó cé wò mì sònè*

   farmer DEF 3SG 1SG clear-BEN

   ‘The farmer cleared (the field) for me.’

b. *pàà lì-cé lè hìn kámátil*

   sun NCM-DEF PROG 1PL give-warmth

   ‘The sun is warming us.’

If indeed language contact is the explanation, Mani would be expected to attest the structure more widely. Thus, Mani offers counter-evidence for an areal influence in a language with heavy Mande influence. I now turn to another Mel language, Sherbro, also closely related to Kisi but more closely related to Mani (66%-69% on a lexical comparison (Grimes 1996)), where the structure does appear, albeit in a limited way.

---

7 On the Sierra Leone side of the former Mani-speaking area, Soso is also used as a primary language but most Mani speakers have switched or are switching to Temne.
Sherbro. Sherbro is the language most closely related to Kisi and would seem to be the logical place to find evidence that might shed light on the provenance or trajectory of the distributed predicate construction. It thus qualifies on the genetic closeness criterion, but is equivocal on the Mande-influence criterion. Although its speakers are also participating in language shift, the pressure is not from Mande alone (here Mende is the significant language) but also from Temne, another Atlantic language (Iverson & Cameron 1986: 12-13), where the S-AUX-O-V structure is also found (see the following paragraphs). Interestingly, we find that Sherbro has split word order in much the same way as Kisi, but only with pronouns, as in Mani. In verbal constructions without auxiliaries, the object comes after the verb whether the object is a pronoun or a noun.

(19) S V O
yà ké mó
I see you
'I see you.'

(19) S V O
yà kònthi-é sòk-sé
'I caught the chickens.' (Rogers 1967: 140)

But when the verb has an auxiliary, pronouns precede the verb and sometimes even also the auxiliary. The primary or unmarked order is the former, however, S-AUX-O-V. Thus, the primary order of S-AUX-O-V parallels the Kisi and Mani situations, while the more marked order does not, showing the intra-language variation we will see elsewhere.

(20) S AUX O V
yà kí mó ké
I will you see
'I will see you.'

(20) S AUX O V
yà mó kí ké
I you will see
'I will see you.'

yà kòñ mó ké
I already you see
'I have seen you already.'

yà mó kòñ ké
I you already see
'I have seen all of you / you completely.'

(Rogers 1967: 147, 150)

8 "A" is an undefined morpheme.
There are no alternative orders when sentences are negated. I mention this here because elsewhere in Atlantic the negative behaves as an auxiliary, but here the negative marker is a clitic on the pronominal object, as shown by both sentences in (21).

(21) S AUX O.NEG V S AUX O.NEG V
    ya kọŋ mà-n cí ya cè mà-n cí
    I already it-NEG carry I be it-NEG carry
    'I have not carried it yet.' 'I used not to carry it.'
    (Rogers 1967: 142, 143)

Full NPs do not appear between the auxiliary and lexical verb but rather after the verb.

(22) ya cè nà kònth sòk-è
    I be recently catch chicken-the
    'I was catching the chicken.' (Rogers 1967: 143)

More than one auxiliary can fill the AUX slot; the pronoun will appear after all of them (contrast this with the behavior of the negative marker in (21)).

(23) ya ká cè mó ké ya bí hà cè wò ké
    I PAST be you see I have to be him see
    'I used to see you long ago.' 'I will be seeing him.' (Rogers 1967: 130)

This generalization about pronouns moving to a slot before the verb is not exceptionless. The example in (24) shows a pronoun appearing after a verb with an auxiliary. Rogers makes no comment, stating only, “A noun phrase, locative phrase, or clause follows the verb phrase; a pronoun object is a part of the verb phrase” (emphasis added) (Rogers 1967: 126).

(24) S AUX V O
    ya ká kè mó
    I past see you
    ‘I saw you long ago.’ (Rogers 1967: 130)

Locative pronouns also appear in the post-auxiliary pre-verbal slot (Rogers 1967: 126).
In sum, Sherbro does indeed have at least an attenuated form of the S-AUX-O-V structure. We should also note that the pattern is not nearly so widespread as it is in Kisi and shows some variation. Sherbro provides equivocal evidence for the areal hypothesis since its speakers are switching to both Mende and Temne.

**Temne.** Temne belongs to the (internally) closely related (Wilson 1962) Baga sub-group of Mel, to which Baga T$jitem$ also belongs, where the structure surprisingly could not be found (Ganong 1998). Temne is one of the two major languages of Sierra Leone and serves as a second language for many speakers. The influence of Mande, then, would be expected to be fairly minimal if not non-existent, but the structure is there.

Temne has the S-AUX-O-V structure only variably: when an auxiliary is present and the object is a pronoun, the pronoun can occur both before and after the verb (Wilson 1961). Note how the subject pronoun and the auxiliary form a single word; it is not clear from the source if the two morphemes are ordered within the word (see note 11).

\[(25) \text{ ɔpɔ ya ti ɔpɔ ti yɔ} \]
\[
\text{AUX-he do it AUX-he it do} \\
\text{‘He had done it.’ (Wilson 1961: 27)}
\]

The next language to be considered, Gola, is less closely related to Kisi than is the Baga sub-group (Wilson 1989), but nonetheless has some S-AUX-O-V constructions, occurring when the objects are pronouns, as in Mani, Sherbro, and Temne.

**Gola.** The Gola people are located in two small pockets in Liberia, just spilling over into Sierra Leone (Sindlinger & Seyi 1973). Gola is not part of the Bullom sub-group (29% cognacy) but still part of Mel (22% cognacy, Wilson 1989). Thus Gola is weak on genetic relatedness to Kisi but has been strongly influenced by Mande, particularly by Mende, to which language almost all Sierra Leone speakers have switched (Sindlinger & Seyi 1973).

As best as can be deduced, Gola features S-AUX-O-V word order, but only when the arguments are pronominal. What is different about Gola is that it involves all verbal constructions, not just ones with auxiliaries, as in Mani. The generalization here is that pronouns *always* precede the (lexical) verb; this holds
for indirect and direct objects, both when they occur singly and when they occur together. The examples in (26) show that full NPs are always after the verb.

(26) \[
\text{S AUX V O} \\
\text{wò nan yèmè wonyaan wofelaa ð nan dhènè lejoo} \\
\text{he PAST see elephant man the PAST buy rice} \\
\text{‘He saw an elephant.’} \\
\text{‘The man bought rice.’} \\
\text{wò yaà dhìkìè ejèè lè} \\
\text{he PROG tie rope the} \\
\text{‘He is tying the rope.’} \\
\text{Sindlinger 1975: 2-3}
\]

The examples in (27) show how pronouns appear between the auxiliary and verb.

(27) \[
\text{S AUX O V} \\
\text{wò nan min yèmè wofelaa ð nan in dhènè} \\
\text{he PAST me see man the PAST it buy} \\
\text{‘He saw me.’} \\
\text{‘The man bought it.’} \\
\text{wò yaà in dhìkìè} \\
\text{he PROG it tie} \\
\text{‘He is tying it.’} \\
\text{Sindlinger 1975: 3-4}
\]

When there are no auxiliaries, pronouns appear before the verb; full NPs appear after.

(28) \[
\text{S O V} \\
\text{Pronoun object: hëë, ka ì komà} \\
\text{yes I it hear} \\
\text{‘Yes, I have heard it.’} \\
\text{S V O} \\
\text{Full nominal: mūā mɓemɓe bɛɛ mĩs} \\
\text{you take trousers my} \\
\text{‘You have taken my trousers.’} \\
\text{Koroma 1994: 97}
\]

In Gola, then, we have attestations of the construction but only with respect to pronouns. Contrasting with Mani, Sherbro, and Temne, however, Gola features
This consideration of several Southern Branch languages has shown us that the S-AUX-O-V syntagm may not be easily correlated with areal factors, i.e., Mande influence. Although the degree of Mande influence is difficult to gauge precisely, Mani is the language that has been most heavily influenced by Mande and there the syntagm is weakly attested. In Temne, likely the language most impervious to Mande influence, the syntagm has something of the same status. Gola and Sherbro have both been more heavily influenced by Mande than Kisi, but neither one has the robustness of the structure found in Kisi. In the absence of any demonstrable correlation with areal factors, then, a genetic source seems more likely on the basis of Southern Branch evidence.

The next section presents several Northern Branch languages with similar constructions; once again no language allows all NPs between the parts of a split predicate, as does Kisi and no other Southern Branch language. One language comes tantalizingly close, however, in allowing phonologically reduced nouns and a locative in the slot.

2.2 The S-AUX-O-V syntagm elsewhere in Atlantic. The isolate Bijogo, belonging to neither the Southern nor the Northern Branch, has the pattern, but in a way slightly different from what has been seen thus far. In several Northern Branch languages, no comparable structures were found: Fulfulde (based on Arnott 1970, Pelletier & Skinner 1981), Diola-Fogny (Sapir 1965, Hopkins 2003 p.c.) Gusilay (Hopkins 2003 p.c.), and Manjaku (Karlik 1972). But in several others it was found, e.g., WamEi, (Hopkins 2003 p.c.), where it was even more widely distributed than in the Southern Branch.

The isolate Bijogo. As with the Southern Branch it is only the pronouns that appear in the slot created by a split predicate, but here only a subset of the pronouns. Bijogo has a noun class system, as do all Atlantic languages, which overlaps with the set of personal pronouns. It is not all possible pronouns that participate in the process. Only the first and second person personal pronouns regularly appear between AUX and the verb. The 3SG / class 1⁹ (object) pronoun -mo-, and in one

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⁹ Segerer uses the terms “class 1” and “class 2” in a way comparable to the way they are used by Bantuists. These classes thus have predominantly animate referents.
dialect the 3PL / class 2 pronoun -ma-, sometimes also appear there (Segerer 2002). (In Bijogo classes 1 and 2 correspond to 3sg and 3pl personal pronouns.)

Thus, the order S-AUX-O-V is possible, but only when the “O” is one of the personal pronouns; the structure is variable for classes 1 and 2. The examples in (29) illustrate the pronoun after the aspectual markers and before the main verb.

(29) u- ba- na- joŋ ‘He will see me.’
cl.1.IMPERF- POT- 1SGO- see

n(a)- anti- nian ‘You (plural) help us!’
2PL.PERF- 1PLO- help

The S-AUX-O-V pattern is found in the Northern Branch, prominently in several languages of the cohesive Cangin sub-group but also in Balanta, a language belonging to the Bak sub-group, and perhaps in a few other places, such as in Biafada, where the discussion of the Northern Branch begins.

**Biafada.** The S-AUX-O-V syntagm occurs widely in Biafada but is limited to pronominal objects, as in the Southern Branch languages examined above (except Kisi). In Biafada, full NP subjects always come before the auxiliary and full NP objects come after the verb, with or without an auxiliary. Object markers, however, move within the verbal complex and appear after the auxiliary and before the verb: “When a verb stem follows an auxiliary or a modal verb, any object suffix semantically linked with it is affixed to the auxiliary or modal” (Wilson 1993: 82). Thus, when the subject is a full NP and the object is a pronoun, one finds the constituent order of S-AUX-O-V. When the subject is not a full NP, however, the subject marker is generally suffixed to the auxiliary. Thus the order AUX-S-O-V can occur when subject and object are both pronouns, as shown in (30). The object remains, however, between the two parts of the split predicate as in all cases when an auxiliary is present.
Biafada belongs to sub-branch “D” (Eastern Senegal-Guinea) of the Northern Branch (see Table 1). No data was available for sub-branch “E” (comprising the two languages Nalu and Pukur), but for all three of the other sub-branches the S-AUX-O-V construction is attested. The next language to be considered, Balanta, comes from the Bak group (sub-branch “C”).

**Balanta.** The facts of Balanta are quite complicated but nonetheless provide some examples of S-AUX-O-V. In Balanta, the S-AUX-O-V construction is obligatory only under restricted circumstances, being limited to object pronouns in negative and subjunctive constructions; it is variable elsewhere. In negative and subjunctive constructions pronominal object markers appear between the negative or subjunctive marker (“AUX”) and the verb. I first exemplify the variable situations, since they are relatively straightforward.

With auxiliaries (the term is used loosely) other than the negative and subjunctive, object clitics may appear on the verb stem (first example) or on the auxiliary (second example), the second possibility providing an example of the S-AUX-O-V syntagm.

(31) \[ \begin{array}{cccc}
S & AUX & V & O \\
η- & gaa & k- & saf -ma \\
1SG.SUB- & PROG & CL4- & writing 3SG.OBJ
\end{array} \] ‘I am writing it.’

\[ \begin{array}{cccc}
S & AUX & O & V \\
sadio & gaa & -ma & riře \\
Sadio & PROG & 3SG.OBJ & sleep.with
\end{array} \] ‘Sadio is sleeping with her.’ (Fudeman 1999: 98)

I now turn to the more complicated case of the negative and the subjunctive.
Negation is marked by consonant alternation and word order changes when objects are pronominal. In addition, a special set of subject prefixes is used with tonal and segmental differences from the “basic” pronouns. The Balanta verb is negated in the Ganja dialect studied by Fudeman by geminating and devoicing the initial obstruent of the object clitic, if there is one. What is relevant to the discussion here is that instead of the object clitic appearing after the verb, as in (32a), it appears before the verb, albeit geminated and devoiced, producing a sequence reminiscent of S-AUX-O-V.

(32) Balanta (Ganja dialect) negation with object clitics (Fudeman 1999: 81)

a. Affirmative  bi-  biifa-  baa
   3PL.SUB-  see-  3PL.OBJ
   ‘They saw them.’

b. Negative  bì-  ppaa-  biifa
   3PL.SUB-  NEG.3PL.OBJ see
   ‘They didn’t see them.’

A slight variation is found in another Ganja dialect. Negation is here signaled by the lengthening of the vowel of the subject prefix and only sometimes gemination of a following consonant. Thus, the subject marker has assumed the function of marking negation, at least some of the time. The example in (33) presents an example where the negation is signalled on the subject and object marker. The constituent order, however, remains S-AUX-O-V.

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10 Fudeman’s dialect is Ganja, as is the dialect treated in N’Diaye-Corréard (1970), (1973). Wilson (1961) treats the Kentohe dialect, which Wilson (1989) considers a different language from Ganja, according to Fudeman (1999: 5).

11 That the subject marker carries distinctions generally associated with AUX is not uncommon in West Africa, e.g., Hausa (Newman 2000), Manjaku (Karlik 1972) and Wolof (below, p. 31); see also the examples for Bijogo and Biafada). Gensler notes in his comments that AUX could be considered “swallowed up” by the subject marker as in, e.g., Mende.
In two other negative constructions we see the object between the two parts of the verb, the “Negative imperfective/future” and negated imperatives.

(34) *Negative imperfective/future* (Fudeman 1999: 97)

\[
\begin{align*}
\text{hal} & \quad \text{á-} & \quad \text{tim-} & \quad \text{ba-} & \quad \text{hur} \\
\text{person} & \quad 3\text{SG.SUB} & \quad \text{NEG.IMPF} & \quad 2\text{PL.OBJ} & \quad \text{know}
\end{align*}
\]

‘No one will know you.’

Object markers also precede the lexical verb in negative imperatives:

(35) \text{ú-} & \quad \text{m} & \quad \text{-bag} & \quad \text{-ni} & \quad \text{sant} \\
2\text{SG.SUB} & \quad \text{-IMPF} & \quad \text{-NEG} & \quad 1\text{SG.OBJ} & \quad \text{talk}

‘[You] don’t talk to me!’ (Fudeman 1999: 94)

The subjunctive marker has a more phonetically overt form, the “discontinuous morph” *-na-ña*, whose first element appears after the subject prefix and before the object marker(s) when present; the second element follows the object marker if present, and the whole complex occurs before the verb stem (Fudeman 1999: 85). When there is no object pronoun, the subjunctive marker is realized as *-nay* ("SBJC"), as in (36).

(36) \text{n-} & \quad \text{kontanu} & \quad \text{u-} & \quad \text{na} & \quad \text{umatirë} & \quad \text{waabo} \\
1\text{SG.SUB} & \quad \text{be.happy} & \quad 2\text{SG.SUB-} & \quad \text{SBJC} & \quad \text{healthy} & \quad \text{now}

‘I am glad that you are feeling better now.’ (Fudeman 1999: 86)

When there are object pronouns, they appear “within” the subjunctive marker, sandwiched between the two parts of the discontinuous subjunctive morpheme, as shown by the examples in (37). Following Fudeman, I have bolded the object markers. Note that there are two objects enclosed within the discontinuous marker in the second example of (37b).
Other tense and mood markers, however, appear after the verb, so in some sense AUX is also paradigmatically “split” in the sense of Gensler & Güldemann 2003. When there are post-verbal auxiliaries, objects occur after the verb before the auxiliaries, the mirror image of the pre-verbal sequence.

From a functional perspective, pronouns in both environments serve to keep the auxiliary and verb separate.

**Cangin: Ndut, Palor, Noon.** In the closely related Cangin languages (Ndut, Noon, and Palor are the three (of five) languages discussed here (see Table 1)), the construction is broadly (and more straightforwardly) attested. Recall that Kisi and the other languages discussed thus far all belong to the Southern Branch and levels of cognacy between the two branches fall well below the level needed for establishing a genetic relationship (9%). Thus, Ndut is only distantly related to Kisi.

**Ndut** has the basic word order SVO. When both a direct and an indirect object occur as either full NPs or pronouns, the indirect object precedes the direct object.
When an auxiliary is present, full NPs follow the verb, but pronouns obligatorily appear between the auxiliary and the main verb, between the two parts of the split verb. The examples in (40) show the logical possibilities for verbs with two objects.

(40) *Word order when auxiliaries are present in Ndut* (Morgan 1996: 31-32)

<table>
<thead>
<tr>
<th>Word form</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full NPs</td>
<td>‘I cannot leave Marietu the watch.’</td>
</tr>
<tr>
<td>Pro IO</td>
<td>‘I will leave her the watch.’</td>
</tr>
<tr>
<td>Pro DO</td>
<td>‘I cannot leave it to Marietu.’</td>
</tr>
<tr>
<td>Pro IO &amp; DO</td>
<td>‘I cannot leave you it.’</td>
</tr>
</tbody>
</table>

In summary, when both direct and indirect objects occur in a clause, a pronoun precedes a full NP, and in clauses with an auxiliary, any object pronouns occur between the auxiliary and main verb.

Note that crucially Ndut has had very little if any contact with Mande languages, isolated as it is in the Thies region of Senegal. Wolof is the most powerful influence, with Fulfulde also having some sway. In addition, Ndut has some
contact with other related languages of the Cangin Group and is particularly close to Palor (84% lexical similarity (Williams et al. 1987)), the next language to be discussed. Thus, we have yet another language with S-AUX-O-V and no Mande influence; the areal explanation is again untenable.

**Pelor.** In simple verbal constructions, i.e., those without an auxiliary, Palor features S-V-O word order, as in (41a). When an auxiliary is present, however, objects may occur between the auxiliary and the verb. In the sentences of (41b), showing the “imminent negative” (l’imminence négative), abbreviated here as “IM.NEG”, we see S-AUX-O-V constituent order. Both pronouns and full NPs occur within the split predicate. In the examples of (41c), marking ‘stative’ (état acquis), the verb is reduplicated. The first occurrence is marked for number, tense, and negation, while the second verb receives only the mark of modality, a final -o. Because of this uneven distribution of categorial marking and because of the parallel with the examples in (41b), where there is no reduplication (AUX comes in the same slot), the first occurrence is interpreted as being more of an auxiliary. The example (41d) comes from the Anterior, also involving verbal reduplication and S-AUX-O-V order.

(41) *S-AUX-O-V in Palor* (D’Alton 1987: 128)

\[
\begin{array}{c}
\text{S} & \text{V} & \text{O} \\
\text{a. tedoxa tente fanfa} & \text{shepherd treat.PERF cow} & \text{‘The shepherd treated the cow.’} \\
\text{b. fun dirro sex} & \text{we IM.NEG you wait} & \text{‘We are not waiting for you.’} \\
\text{fu dir payl wof} & \text{you IM.NEG wood look.for} & \text{‘You are no longer going to get firewood.’}
\end{array}
\]
As can be seen from the examples, both pronominal and nominal objects are inserted within the discontinuous predicate. Note that although the process replicates qualitatively what happens in Kisi, it happens only variably. This is unprecedented in Atlantic outside Kisi.

Noon is yet another member of this closely related group and provides a crucial missing type. Generally speaking, full NPs appear after the verb in constructions with AUX, and pronouns move within the predicate, just as we saw in Ndut and Palor. Noon, however, has the important added feature of some nouns being allowed to move inside the complex as well, but crucially, only if they are monosyllabic (my emphasis, Soukka 2000: 210). (42) illustrates where the noun is typically found (after the verb); (42b) shows what happens when the object is a pronoun, and the revealing example in (42c) shows what happens when the noun (‘people’ 6o’) is monosyllabic.

(42) Noon monosyllabic nouns move into preverbal slot (Soukka 2000: 210-11)

a. S    AUX       V      O

6eti-faa hay ki-tik cuunoh
woman-DEF will(AUX) INF-cook lunch(OBJ)
‘The woman will prepare lunch.’

b. S    AUX       O      V

ya mi wa ki-tik
she can C1SG INF-cook
‘She can prepare it.’
Moreover, it is not just monosyllabic nouns that can move in, but also what Soukka calls “monosyllabic complements”, the proximal deictic in (43).

(43) \textit{Monosyllabic complements may also split predicates} (Soukka 2000: 211)
\[
\begin{array}{l}
ya \text{ haan} & \text{dii} & \text{ki-hay} \\
\text{she} & \text{have, just(Aux)} & \text{here} & \text{INF-come} \\
\end{array}
\]
‘She has just come here.’

The example in (43), then, shows that it is not that the word for ‘people’ is becoming grammaticized as an impersonal pronoun, although that may be true as well, but rather that the motivation is \textit{phonological}. Note that despite its monosyllabicity, the status of the word for ‘here’ as a locative may be more important in explaining why it is allowed within the split, since in Kru and other languages locatives are licensed to move in.

The last example from Noon shows that the structure is robust, as in Kisi, for it works in constructions with less prototypical auxiliaries as well.

(44) \[
\begin{array}{l}
dî \text{jéem-ee-ra} & \text{ki-iis} & \text{ca} & \text{ki-ñam} \\
\text{we, EXCL} & \text{try(Aux)-PAST-PUNCT} & \text{INF-leave(Aux)} & \text{OBJ(C1PL)} & \text{INF-eat} \\
\end{array}
\]
‘We tried to stop eating them (e.g., peanuts).’ (Soukka 2000: 211)

I now turn to one of the most widely spoken languages, Wolof.

\textbf{Wolof}. In oral presentations of this paper, I stated unequivocally that Wolof did not have the structure, basing myself on Ngom 2003 and several personal communications. Since that time I have (happily) found traces, based on several more personal communications and a closer look at the Ngom grammar.\footnote{My thanks to Kevin Moore and Fiona McLaughlin for their assistance; they should not be held responsible for any of my misunderstandings. The Wolof facts are quite complex and their interpretation controversial. The final analysis should perhaps await a Wolof specialist.} This trace is
important because it means that the syntagm is attested in all major subdivisions of Atlantic (save the Nalu branch consisting of two languages on which there is little literature), some of which may represent isolates (Bijogo) or separate entities (Northern vs. Southern) on a par with other Niger-Congo groups. Thus, the syntagm indeed forms part of Proto-Niger-Congo, as claimed on the basis of other evidence in Gensler (1994).

Wolof is overwhelmingly an AUX-V-O language with a complex set of rules governing subject and object placement (Gensler 2005 p.c.). The few examples below and the surrounding discussion do no justice to that complexity but may offer another avenue of investigation for analysis (see note 12). In the following example, kontine di is considered to be a single “complex verb” and what follows is its complement. Thus, the object precedes the verb and follows what could be interpreted as an (incipient) auxiliary (especially so, in that kontine is a borrowing; languages do not usually borrow auxiliaries, e.g., Thomason & Kaufman 1988).

(45) *Wolof* (Munro & Gaye 1991: x)

mungi kontine di ko lekk

he continue INC it eat

‘He is continuing to eat it.’

That a semblance of the S-AUX-O-V syntagm is found with incipient auxiliaries (and a borrowing) suggest the cognitive reality of the pattern to speakers, much as is the case for speakers of Kisi. More complicated focus constructions illustrate the V-O and O-V alternations precipitated by the presence of AUX and characteristic of languages with the S-AUX-O-V structure.

For some scholars the focus marker is said to convey aspect and thus would carry the same information usually marked on an auxiliary (McLaughlin 2004 p.c.). The examples in (46) below feature two focus markers occurring after the subject and before the object: NGI (emphasis on the entire sentence) and LA (emphasis on the object). When the object is a full NP, it appears after the verb, as in the first column. If the object is a pronoun it appears before the verb, the pattern we have seen in many other Atlantic languages.
(46) **Wolof focus constructions** (Ngom 2003)

\[
\begin{align*}
\text{NGI} & \quad \text{yeen a nyi yyang wolo} & \quad \text{yeen a nyi koy yyang} \\
& \quad \text{you FOC study Wolof} & \quad \text{you FOC it study} \\
\quad & \quad \text{‘You are studying Wolof.’} & \quad \text{‘You are studying it.’}
\end{align*}
\]

\[
\begin{align*}
\text{LA} & \quad \text{tey laa wax falu} & \quad \text{tey laa ko wax} \\
& \quad \text{I FOC tell Falu} & \quad \text{I FOC him tell} \\
\quad & \quad \text{‘I told Falu today.’} & \quad \text{‘I told him today.’}
\end{align*}
\]

Thus we have relics of S-AUX-O-V attested widely in Wolof, if indeed the focus element is considered AUX. Even without such an interpretation the change in order from VO to OV when the focus marker is present is suggestive.

It now remains to put these facts in some kind of order.

3. **Discussion.**

I have not detailed how the present-day Atlantic languages reached their present state. Gensler has indicated some possible trajectories, and the work of Heine and his students, e.g., Heine & Kuteva (2001), points to many others. Why the structure has disappeared in some languages and is only faintly attested in others may be attributed to its longevity, i.e., simple attrition. In (47) are organized the attested outcomes by type using targets, robustness, and degree of grammaticization as criteria.

(47) **Evidence for *S-AUX-O-V in Proto-Atlantic**

1. The syntactic split persists
   a. Affects all NPs and pronouns
      i. partially disappears from the syntax, other orders alternate with S-AUX-O-V: Kisi (parallels elsewhere in the grammar, e.g., incipient auxiliaries)
      ii. but not in all compound predicates: Palor
   b. Affects only pronouns
      i. in simple and compound predicates (S-(AUX-)O-V): Gola
      ii. and some phonologically similar nouns, phonologization: Noon
      iii. only when auxiliaries are present: Temne, Sherbro (with some variation).
IV. only in some constructions: Balanta (negatives and subjunctives), Biafada (incipient auxiliary constructions) 
c. Affects only some pronouns: Bijogo

2. Morphologization
   a. Partial: auxiliary complex merges with subject pronouns, auxiliary and verb still separate words: partial in several languages (Temne, Wolof)
   b. Complete: Split disappears from the syntax, found at the word level but only with pronouns/object agreement markers, the auxiliary and verb become a single word: Bijogo (not all pronouns)

3. The split disappears, with no traces of the earlier S-AUX-O-V, e.g., Manjaku

Gensler (1994) presents convincing methodological and empirical arguments for the reconstruction of the S-AUX-O-V-Other syntagm as part of Niger-Congo, including the “quirk” argument given below, as stated in a later paper (Gensler 1997).

From a purely Niger-Congo-internal perspective, S-AUX-O-V-Other thus appears quite ordinary; it seems merely the natural outcome of routine grammaticization processes. In global perspective, however, it is anything but “natural”... The syntagm is thus a highly marked quirk of Niger-Congo... [p. 68]

... the striking rarity of S-AUX-O-V-Other outside of Niger-Congo makes this syntagm a prime candidate for attribution to the protolanguage... [p. 91]

Quirky it is not, however, in Niger-Congo. Similar structures are found throughout Niger-Congo, as Gensler & Güldemann (2003) mention, and the many papers given at WOCAL/ACAL (2003) attest. It is featured throughout in Mande (Kastenholz 2003), a language family that branched off from the Niger-Congo stock at about the same time as Atlantic (Williamson & Blench 2000). It is also found prominently in Kru, e.g., Marchese (1989). Marchese notes that basic Kru word order is SVO in unmarked utterances, but when an auxiliary is present, the word order changes to S-AUX-O-(O-)V, exactly as in Kisi. I direct readers to Gensler (1994) for full details, as well as to Gensler (1997), a review of Claudi (1993), in which he argues against the syntagm as being the product of grammaticization but rather for the syntagm as being the source of the multiple word orders found in Niger Congo. The evidence presented here corroborates his claim
that the pattern should be reconstructed, and at the same time undercuts the claim that the phenomenon is areal.

To claim that the structure is an innovation seems wrong for a number of reasons, most of them presented convincingly by Gensler. On the basis of the evidence adduced here, it is difficult to explain its many instantiations as due to multiple innovations. If indeed it were an innovation it would be a very old one indeed. Surely it seems more economical and plausible to posit the structure as an old and established one that has suffered some attrition. A more cogent argument would involve the presence of full nouns in the split predicate as an innovation, and I have suggested above how a phonological explanation is plausible for at least Atlantic. But when the Atlantic facts are stacked up against those of Niger-Congo in general, the structure’s presence is overwhelmingly attested and will probably be found elsewhere as studies broaden and deepen.

4. Conclusion.

The evidence from Songhai (Heath 1999a, 1999b) and elsewhere (Gensler 1994) suggests that the S-(AUX-)O-V construction may spread by contact. But because the construction is present in Atlantic and in other branches, it must be reconstructed for Atlantic and likely for all of Niger-Congo since Atlantic is one of the earliest branchings off the Niger-Congo stock. Songhai shows only what is possible, not what has happened in all cases. Local areal explanations seem possible; even for Kisi one could see the influence of Mande as reinforcing the structure, not allowing it to weaken to just pronouns as so commonly happens elsewhere.

That the construction appears in both the Southern and the Northern Branches of Atlantic (and in the isolate Bijogo) is extremely strong evidence that we must reconstruct the syntagm for all of Niger-Congo, for the two branches likely constitute separate groups (e.g., Wilson 1989, Childs 2001). In preserving the older system, that is, in requiring not just pronouns but also full NPs between the auxiliary and the verb, Kisi is more conservative than the other languages. Although this paper contributes little to claims for the genetic unity of Atlantic, it strengthens Gensler’s claim for reconstructing the syntagm for Niger-Congo (even more so if Atlantic is broken up); it also affirms Atlantic’s membership, if not exact place, within Niger-Congo.

As may have been noticed by the paucity of data on some languages, other Atlantic languages need additional study. Further work, then, will involve both deepening and broadening the sample considered. The in-depth analysis that was possible for Kisi should be extended to other Atlantic languages, and the overall
analysis itself should be extended to all languages in the group. Unfortunately not all Atlantic languages have the necessary documentation, and some of the Atlantic languages may disappear before they can be adequately described (Childs 2003a). Thus, there is some urgency to the task.

With a broader investigation, one could not only reconstruct the structure for Atlantic as a whole, but also establish grammaticization chains, as discussed in section 3. At this point it seems likely that the latter task is the more formidable since most of the evidence illustrates how the variable structure has become attenuated.

As a final word, I would like to underscore what has been said about allowing for variation. Linguists (comparative and otherwise) should tolerate and even embrace some variation in their reconstructions, as has been pointed out many times, e.g. Guy (to appear), as well as by Gensler (1994), (1997), both of whom try to dispel the notion that we should see grammars as monolithic. Heuristically valuable as the construct of a monolithic grammar is, such an assumption may constrain our investigations and prevent us from seeing the organic richness of language.

**Abbreviations**

<table>
<thead>
<tr>
<th>Abbreviation</th>
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<tbody>
<tr>
<td>1SO</td>
<td>First singular object pronoun</td>
<td>INF</td>
<td>Infinitive marker</td>
</tr>
<tr>
<td>2SO</td>
<td>Second singular object pronoun</td>
<td>n.d.</td>
<td>no date</td>
</tr>
<tr>
<td>3SO</td>
<td>Third singular object pronoun</td>
<td>NEG</td>
<td>Negative marker</td>
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<tr>
<td>AUX</td>
<td>Auxiliary</td>
<td>O</td>
<td>Object</td>
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<tr>
<td>C1SG</td>
<td>Class 1 singular</td>
<td>OBJ</td>
<td>Object</td>
</tr>
<tr>
<td>C2SG</td>
<td>Class 2 singular</td>
<td>PFV</td>
<td>Perfective verbal marker</td>
</tr>
<tr>
<td>CL.DT</td>
<td>Classifier-determiner combination</td>
<td>PL</td>
<td>Plural</td>
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<tr>
<td>FOC</td>
<td>Focus marker</td>
<td>POT</td>
<td>Potential (virtuel)</td>
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<td>HAB</td>
<td>Habitual</td>
<td>POL</td>
<td>Politeness particle</td>
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<tr>
<td>IMPERF</td>
<td>Imperfect (inaccompli)</td>
<td>PROG</td>
<td>Progressive</td>
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<td></td>
<td></td>
<td>Q</td>
<td>Question particle</td>
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<td></td>
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<td>S</td>
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<td></td>
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<td>v</td>
<td>Verb</td>
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REFERENCES


Earthy, E. Dora. n.d. *Field notes. Collected during a brief stay among the Kisi, 1933-34*. Madison, WI: Department of African Languages and Literature, University of Wisconsin MS.


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WH-QUESTIONS IN KITHARAKA*

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This paper explores question formation in Kitharaka (E54; Bantu; Kenyan) within the crosslinguistic approach developed in Sabel (2000, 2002, 2003). According to Sabel, variation in the positioning of wh-phrases in languages can be explained if it is assumed that wh-movement is universally triggered by [+wh] and [+focus] features, both of which are [+interpretable] and can be specified as [±strong]. For Kitharaka, I argue that wh-movement is triggered by a strong [+focus] feature in a functional head (Foc). The strong [+focus] feature on a focus head is morphologically manifested by a focus marker which attaches to a fronted wh-phrase, and in case of long wh-movement, by the focus markers that may appear on embedded clauses crossed by overt wh-movement. Wh-in situ occurs when no strong [+focus] features are introduced in the syntax (Muriungi 2003, 2004).


Kitharaka is an SVO Bantu language spoken by one of the groups of Central Bantu of Kenya called the (A)Tharaka. Therefore, in a simple main clause affirmative sentence, the subject comes first, then the verb and the object.

* This paper is an elaborated version of my MA research report Wh-Questions in Kitharaka. Thanks to Jochen Zeller who supervised the report. The paper has benefited a lot from discussions with Klaus Abels and Luisa Marti. Thanks to David Odden, for his extensive comments, and to two anonymous reviewers of SAL for very insightful observations. Earlier versions of this paper were presented at the Wits/Rau Postgraduate Conference (Johannesburg; South Africa), and the workshop on the Syntax and Semantics of Questions (Nancy; France). I carry the blame for any flaws in this paper.
(1) Maria n-a-ra-k-ir-e nyomba ‘Maria built a house’
Maria f-sm-pn-build-perf-fv house

(1) is the most unmarked/neutral sentence form, and it contains the focus marker as the first of the verbal prefixes. It denotes focus on the whole sentence or the VP, and can thus be used felicitously as an answer to an S-question (2) or a VP question (3).

(2) I-mbi i-ri na thiina ‘What is the problem?’
    f-what sm-be with problem

(3) N-ata Maria a-ra-ruth-ir-e ‘What did Maria do?’
    f-what Maria sm-pn-do-perf-fv

In fact the general requirement in Kitharaka is that a sentence should always contain at least one focus. Thus even in the absence of the preverbal focus

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1 The following abbreviations are used in this paper:

- f focus particle
- neg negation
- pres present tense
- fut future tense
- pc current past (today past)
- pr remote past
- pn near past (= yesterday past)
- loc locative
- 1st sg first person singular
- 1st pl first person plural
- 2nd sg second person singular
- vs verb stem
- sm subject marker
- om object marker
- perf perfective
- hab habitual
- appl applicative marker
- rec reciprocal
- rel relative
- pass passive marker
- fv final vowel

Angle brackets containing a syntactic item, e.g. <who>, indicate the base position of that item. Small caps indicate non-wh focus. A and B indicate members in a conversational exchange and # indicates a discourse-inappropriate sentence.

Although not much has been done on the Kitharaka sound system, orthographic ‘i’ represents the phonemes [i] and [e], ‘a’ is [a], ‘e’ is [ɛ], ‘u’ is [u] or [o], ‘o’ is [ɔ]. Also, ‘b’ may be identified as [β], ‘g’ as [ɣ] and ‘th’ as [ð]. The sequences ‘ng’, ‘nd’ and ‘mb’ indicate the prenasalized consonants. The Kitharaka examples in this paper will be provided in Kitharaka orthography. Kitharaka is a tonal language, but since it does not appear to me at present that tone has a crucial influence on the subject at hand, tones will not be indicated.
marker, a post-verbal element must be interpreted as the focus. In (4), the post­
verbal wh-phrase and the object are the focus.

(4) Maria a-k-ir-e mbi ‘What did Maria build?’
    Maria sm-build-perf-fv what

Maria a-k-ir-e NYOMBA ‘Maria built A HOUSE’
    Maria sm-build-perf-fv house

When there is a post-verbal focus (wh, or non-wh) the focus marker cannot
remain in the preverbal position.

(5) *Maria n-a-k-ir-e mbi ‘What did Maria build?’
    Maria f-sm-build-perf-fv what

*Maria n-a-k-ir-e NYOMBA ‘Maria built A HOUSE’
    Maria f-sm-build-perf-fv house

In fact, even when there is wh-extraction in main clauses, the focus marker in the
preverbal position is obligatorily absent, as in (6). In these sentences, however,
the focus marker obligatorily appears on the fronted wh-phrase or focus, as in (7).

(6) *I-mbi Maria n-a-k-ir-e <mbi>
    f-what Maria f-sm1-build-perf-fv
    ‘What did Maria build?’

*I-NYOMBA Maria n-a-k-ir-e <nyomba>
    f-house Maria f-sm-build-perf-fv
    ‘Maria built A HOUSE’

(7) I-mbi Maria a-k-ir-e <mbi>
    f-what Maria sm1–build–perf–fv
    ‘What did Maria build?’

I-NYOMBA Maria a-k-ir-e <nyomba>
    f-house Maria sm-build-perf–fv
    ‘Maria built A HOUSE’
The requirement for overt focus in every clause entails some interesting restrictions for intransitive verbs. Intransitive verbs obligatorily must have the preverbal focus marker, except when the subject is focused or there is a post-verbal adverb.

(8) a. Ncugu n-a-rir-ir-e ‘Ncugu cried’
   Ncugu f-sm-cry-perf-fv

b. *Ncugu a-rir-ir-e ‘Ncugu cried’
   Ncugu sm-cry-perf-fv

c. I-NCUGU a-rir-ir-e ‘NCUGU cried’
   f-Ncugu sm-cry-perf-fv

d. Ncugu a-rir-ir-e RUKIIRI ‘Ncugu cried in the MORNING’
   Ncugu sm-cry-perf-fv morning

The ungrammaticality of (8b) follows from the fact no post-verbal element gets the focus associated with the absence of the preverbal focus marker.

1.1 Some restrictions of tense and focus. There are two main sentence types that do not contain the preverbal focus marker in their neutral form: sentences in the present perfect tense, and sentences in the future. Present perfect sentences never ever take the preverbal focus marker. This follows from the simple fact that a sentence with the focus marker would convey a present progressive reading (cf. (9a) and (9b)).

(9) a. Karimi n-a-ku-rir-a ‘Karimi is crying’ (Present progressive)
   Karimi f-sm-pres-cry-fv

b. Karimi a-ku-rir-a ‘Karimi has cried’ (Present perfect)
   Karimi sm-pres-cry-fv

The future marker also generally does not take the preverbal focus marker, but when it does, it gives rise to a must reading. The neutral form of the sentence is therefore the one without the focus marker.
I discuss the exceptions concerning the distribution of the focus marker, the present perfect and the future in section 10 of this paper.

1.2 The main generalizations. Exceptions in section 1.1 aside, the data in (1-8) leads to the following conclusions:

i. that there can be maximally only one focus marker per clause in Kitharaka (cf. 6)
ii. that each sentence must contain at least one focus (see the restrictions on intransitive verbs) and
iii. foci in Kitharaka can be post or preverbal.

We discuss question formation in Kitharaka in section 2, in light of these conclusions.

2. Question-Formation Strategies.

Descriptively, Kitharaka uses four strategies to form questions: full wh-movement/wh-ex situ (11), wh-in situ (12), partial wh-movement (13), and the intermediate strategy where the wh-phrase appears immediately after the subject, (14). The wh-phrase may also appear between a fronted object-topic, and the subject, (15).

(11)  **N-uu** John a-ring-ir-e <uu>  (Full wh-movement)
f-who John sm-beat-perf-fv
‘Who did John beat?’

(12)  **I-mbi** g-ug-ir-e ati John n-a-ring-ir-e <mbi>
f-what 2<sup>nd</sup> sg-say-perf-fv that John f-sm-beat-perf-fv
‘What did you say that John beat?’
It should be noted that in partial wh-movement, in the intermediate strategy and in the sentence form with the wh-phrase between the fronted object-topic and the subject, the object-topic, the subject and the wh-phrase follow the complementiser.

The data in (11-15) show Kitharaka to be a mixed type of language with respect to question formation, allowing full wh-movement (like English), wh-in situ (like Chinese) partial wh-movement (like Iraqi Arabic) and the intermediate strategy (like Kikuyu). Kitharaka also allows wh-in situ in embedded questions selected by matrix verbs, see (16) and (17).

2 The g attached to this wh-phrase does not have any semantic value. In fact some speakers do not use it in speech. For the time being, I analyze it as a consonant inserted to avoid hiatus.
Wh-Questions in Kitharaka

(16) n-ti-iji    Munene    a-gur-ir-e   mbi
1st sg-neg-know Munene     sm-buy-perf-fv what

n-ti-iji    i-mbi    Munene    a-gur-ir-e <mbi>
1st sg-neg-know f-what       Munene     sm-buy-perf-fv

'I don’t know what Munene bought’

(17) Tu-ri-ama Munene a-ka-aja ri
1st sg-pres-wonder Munene     sm-fut-come when

Tu-ri-ama       i-ri    Munene    a-ka-aja <ri>
1st sg-pres-wonder f-when       Munene     sm-fut-come

'We wonder when Munene will come’

In this respect Kitharaka resembles Zulu which allows wh-in situ in embedded questions selected by matrix V, as in (18), but differs significantly from French which never allows wh-in situ in embedded questions selected by matrix verbs, as in (19).

(18) [CP Ngi-buze [CP ukuthi y-ini uPeter a -yi-thengile-yo]]
1st sg-asked that cop-what 9Peter 1arc1a-oc9-bought -rs

[CP Ngi-buze [CP ukuthi uPeter a -yi -thengile-yo-ni]]
1st sg-asked that 9Peter 1arc1a-oc9-bought -rs -what

‘I asked what Peter bought’ (Zulu; Sabel & Zeller 2004)

(19) *Je ne sais pas [CP [elle a rencontré qui]]
‘I don’t know who she has met’

Je ne sais pas [CP qui [elle a rencontré ]]
‘I don’t know who she has met’ (French; Rizzi 1996)

I should add here that the focusing positions available for wh-phrases in Kitharaka are also available for other focused items such as determiner phrases, adverb phrases, prepositional phrases, adjective phrases, and verb phrases. Thus in addition to focus in situ and ex situ, DPs, AdvPs, PPs, AdjPs and VPs can undergo partial and intermediate focus movement (see Muriungi 2004 for some relevant examples).
3. Morphology and Wh-Question Formation.

3.1 Focus marking. Whenever a wh-phrase is moved in Kitharaka, it must have the particle *n/i*. The sentences in (11-15) are therefore ill-formed if the fronted wh-phrase does not have the particle.

(20) *uu John a-ring-ir-e <uu>
    who John sm-beat-perf-fv
    ‘Who did John beat?’

*mbi g-ug-ir-e ati John n-a-ring-ir-e <mbi>
    what 2^nd sg-say-perf-fv that John f-sm-beat-perf-fv
    ‘What did you say that John beat?’

(21) *g-ug-ir-e ati uu John a-ring-ir-e <uu>
    2^nd sg-perf-fv that who John sm-beat-perf-fv
    ‘Who did you say that John beat?’

(22) *John uu a-ring-ir-e <uu>
    John who sm-beat-perf-fv
    ‘Who did John beat?’

*G-ug-ir-e ati John mbi a-ring-ir-e <mbi>
    2^nd sg-say-perf-fv that John what sm-beat-perf-fv
    ‘What did you say that John beat?’

(23) *John a-ug-ir-e ati kaari gaka, mbi Maria
    John sm-say-perf-fv that girl this what Maria
    a-ka-nenk-e-er-e
    sm-om-give-appl-perf-fv
    ‘What did John say that this girl, Maria, gave to her?’

The particle on a moved wh-phrase occurs as *n* when the wh-phrase begins with a vowel, and as *i* when the wh-phrase begins with a consonant. These two particles are allomorphic manifestations of the same particle, the Kitharaka focus marker (see section 7 for a defense of this terminology). As we already saw in section 1, these particles are obligatorily absent on an *in situ* focus or wh-phrase.
Recall also the observation that there can be maximally only one focus marker per clause, and that an object (and generally a postverbal adjunct) can only be a focus in the absence of the preverbal focus marker (section 1).

3.2 Tense marking. I provided above most of the examples containing wh-questions in the current (today) past tense. For these questions and those in the near (yesterday) past, (25), and remote past, (26), the marking of tense is morphologically the same under wh-extraction and wh-in situ.

3 The current past tense, a tense which describes a past event that has occurred within today, does not have an overt tense marker. The only overt marker of pastiness in this tense is the perfective aspect marker ir.
the tense form must appear as *ri (27a-b, 28a-b). The tense forms cannot be mixed
in the same sentence; see (27c) and (28c).

(27) a. **I-mbi** u-**ku-thugania** ati John n-a-**ku**-**ring-a**<mbi>
  f-what 2nd sg-pres-think that John f-sm-pres-beat-fv
  ‘What do you think that John is beating?’

  b. *I-mbi u-**ri-thugania** ati John n-a-**ri**-**ring-a** <mbi>
  f-what 2nd sg-pres-think that John f-sm-pres-beat-fv
  ‘What do you think that John is beating?’

  c. *I-mbi u-**ku-thugania** ati John n-a-**ri**-**ring-a**<mbi>
  f-what 2nd sg-pres-think that John f-sm-pres-beat-fv
  ‘What do you think that John is beating?’

(28) a. **U-**ri-thugania ati John a-**ri**-**ring-a** uu
  2nd sg-pres-think that John sm-beat-fv who
  ‘Who do you think that John is beating?’

  b. *U-**ku-thugania** ati John a-**ku**-**ring-a** uu
  2nd sg-pres-think that John sm-pres-beat-fv who
  ‘Who do you think that John is beating?’

  c. *U-**ri-thugania** ati John a-**ku**-**ring-a** uu
  2nd sg-pres-think that John sm-beat-fv who
  ‘Who do you think that John is beating?’

Similar changes are also observed with relativization, topicalization and focaliza­
tion. These syntactic processes obligatorily take the *ku/gu form.

(29) Muntu ura a-**gu-ta-a** ruji
    person that sm-pres-fetch-fv water
    ‘The person who is fetching water’

    *Muntu ura a-**ri-ta-a** ruji  (Relativization)
    person that sm-pres-fetch-perf-fv water
    ‘The person who is fetching water’
Wh-Questions in Kitharaka

(30) Ruji, Makena  
water Makena  
‘As for water, Makena is fetching’

*Ruji, Makena a-ri-ta-a (Topicalization)
water Makena sm-pres-fetch-fv
‘As for water, Makena is fetching’

(31) I-RUJI Makena a-gu-ta-a
f-water Makena sm-pres-fetch-fv
‘Makena is fetching WATER’

*I-RUJI Makena a-ri-ta-a (Focalization)
f-water Makena sm-pres-fetch-fv
‘Makena is fetching WATER’

Lastly, the ri and ku alternation occurs in present tense verbs taking infinitives as complements. The ku form takes the focus marker, but the ri form cannot.

(32) a. Kendi a-ri-end-a ku-mama ‘Kendi wants to sleep’
Kendi sm-be-want-fv 15-sleep

b. *kendi n-a-ri-ind-a ku-mama ‘Kendi wants to sleep’
Kendi f-sm-be-want-fv 15-sleep

(33) Kendi n-a-ku-end-a ku-mama ‘Kendi wants to sleep’
Kendi f-sm-pres-want-fv 15-sleep

Both (32a) and (33) denote focus on the infinitive verb and are therefore appropriate as answers to (34).

(34) N-ata Kendi a-ku-end-a ku-ruth-a
f-what Kendi sm-pres-want-fv 15-do-fv
‘What does Kendi want to do?’

Kendi a-ri-end-a ku-ruth-a ata
Kendi sm-pres-want-fv 15-do-fv what
‘What does Kendi want to do?’
The simple fact here is that *ri* appears when there is an *in situ* focus, the *ku* form when there is wh-related movement (relativization, topicalization, focalization, wh-movement).

### 3.3 Negation.

Kitharaka has two forms of negation, *ti* and *ta*. *Ti* is the most common negative form and it appears in all negative declarative sentences in the present tense, current (today) past, and near (yesterday) past. All these sentence types have the negative morpheme between subject agreement and tense (sentences not provided for space reasons).

The future tense marker usually never co-occurs with negation. Thus in the presence of negation, the future tense marker disappears.

(35)  
Karimi a-ka-rug-a kathoroko  
Karimi sm-fut-cook-fv beer  
‘Karimi will prepare Kathoroko (a traditional Tharaka beer)’

Karimi a-ti-rug-a kathoroko  
Karimi sm-fut-cook-fv beer  
‘*Karimi will not prepare Kathoroko’

*Karimi a-ti-ka-rug-a kathoroko  
Karimi sm-neg-fut-cook-fv beer  
‘Karimi will not prepare Kathoroko’

When the future prefix combines with negation, it gives rise to a meaning of roughly the form ‘don’t’. This use of negation and the future is common in imperatives.

(36)  
U-ti-ka-rongo-e  
2nd sg-neg-fut-cheat-fv  
‘Don’t cheat’

U-ti-ka-thungiir-e  
2nd sg-neg-fut-enter-fv  
‘Do not commit adultery’

Question formation interacts with negation is some interesting ways. I showed that an affirmative verb without the focus marker allows both wh-*in situ* and *ex situ* (see (25) and (26)). Contrary to this, a negative verb forces wh-extraction (this observation holds for the two allomorphs of negation).
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(37) **N-uu** John a-ti-ra-ring-a <uu> (Full wh-movement)
    f-who John sm-neg-pn-beat-fv
    ‘Who didn’t John beat?’

John **n-uu** a-ti-ra-ring-a <uu> (Intermediate wh-movement)
John f-who sm-neg-pn-beat-fv
‘Who didn’t John beat?’

*John a-ti-ra-ring-a (g)uu (Wh- in situ)
John sm-pn-beat-fv who
‘Who didn’t John beat?’

The *ti* form also occurs freely in negative questions in the current (today) past, the near (yesterday) past, and the present perfect.

The other negative marker *ta* occurs in very restricted syntactic environments. First, it occurs in all negative sentences in the remote past tense, be they declarative sentences, as in (38b), wh-questions, as in (38c), or relative clauses, as in (38d). The *ti* form cannot occur in these sentences. 4

(38) a. Ciimba n-i-a-rug-ir-e nkima mwanka muthiru (Affirmative)
    lion f-sm-pr-cook-perf-fv food year finished mative
    ‘The lion cooked food last year’

b. Ciimba i-ta-a-rug-a nkima mwanka muthiru
    lion sm-neg-pr-cook-perf-fv food year finished
    ‘The lion didn’t cook food last year’

c. **I-mbi** ciimba i-ta-a-rug-a <mbi> mwanka muthiru
    f-what lion sm-neg-pr-cook-perf-fv year finished
    ‘What didn’t the lion cook last year?’

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4 All affirmative declarative sentences in the past come with the perfective marker *ir*. In the negative, the perfective disappears. Irrespective of tense, all negative declarative sentences in Kitharaka come with the final vowel *a* suffixed on the verb.
d. Ciimba ira <ciimba> i-ta-a-rug-a nkima
lion that sm-neg-pr-cook-perf-fv food
mwanka muthiru
year finished

‘The lion which didn’t cook last year’

The *ta* negative form also occurs in subordinate *without*-clauses. The use of the *ta* tense form in the subordinate *without*-clause is not conditioned by the tense of the matrix clause. The use of *ti* here is unacceptable.

(39) Kinyua a-a-kuruk-ir-e kigerio a-ta-thom-eet-e
Kinyua sm-pr-pass-perf-fv exam sm-neg-read-st-fv
‘Kinyua passed the exam without having read’

*Kinyua a-a-kuruk-ir-e kigerio a-ti-thom-eet-e
Kinyua sm-pr-pass-perf-fv exam sm-neg-read-st-fv
‘Kinyua passed the exam without having read’

Finally, *ta* occurs with present tense *ku*-marked verbs which have a moved wh-phrase or focus within the clause in which these verbs occur, as in (40-43). *Ti* cannot occur in this context.

(40) **N-uu <uu> a-ta-ku-ring-a Maria** ‘Who isn’t beating Maria?’
    f-who sm-neg-pres-beat-fv Maria

I-MURIMI a-ta-ku-ring-a Maria ‘MURIMI isn’t beating Maria?’
    f-Murimi sm-neg-pres-beat-fv Maria

(41) **N-uu Murimi a-ta-ku-ring-a <uu>** ‘Who isn’t Murimi beating?’
    f-who Murimi sm-neg-pres-beat-fv

I-MARIA Murimi a-ta-ku-ring-a <Maria>
    f-Maria Murimi sm-neg-pres-beat-fv
‘Murimi isn’t beating MARIA’
(42) **N-ata Murimi a-ta-ku-ruth-a** ‘What isn’t Murimi doing?’
    f-what Murimi sm-neg-pres-do-fv

    I-KU-RING-AN-A Murimi a-ta-ku-ring-an-a
    f-15-beat-rec-fv Murimi sm-neg-pres-beat-rec-fv
    ‘Murimi isn’t BEATING’

(43) **I-mbi u-ta-ku-thugania ati Munene n-a-ku-ringa <mbi>**
    f-what 2nd sg-neg-pres-think that Munene f-sm-pres-pres-beat-fv
    ‘What don’t you think Munene is beating?’

    *I-mbi u-ti-ku-thugania ati Munene n-a-ku-ringa <mbi>
    f-what 2nd sg-neg-pres-think that Munene f-sm-pres-pres-beat-fv
    ‘What don’t you think Munene is beating?’ (Ti occurs as a clausemate
to matrix wh)

    U-ri-thugania ati i-mbi Munene a-ta-ku-ringa <mbi>
    2nd sg-pres-think that f-what Munene sm-neg-pres-pres-beat-fv
    ‘What do you think Munene isn’t beating?’

    *U-ri-thugania ati i-mbi Munene a-ti-ku-ringa <mbi>
    2nd sg-pres-think that f-what Munene sm-neg-pres-pres-beat-fv
    ‘What do you think Munene isn’t beating?’ (Ti occurs as clausemate
to embedded wh)

    *I-mbi u-ta-ku-thugania ati Munene a-ta-ku-ringa <mbi>
    f-what 2nd sg-neg-pres-think that Munene sm-neg-pres-beat-fv
    ‘What don’t you think Munene isn’t beating’

    (Ta occurs in matrix as well as embedded wh-phrase)

3.4 **Subject agreement.** Harford (1997) shows that in Kitharaka, the class 1
subject agreement marker, which is usually *a*, may occur as *u* (relative) in subject
relative clauses.

(44) **I-mb-on-ir-e muntu ura a-ca-ir-e mwatu**
    f-1sg-see-perf-fv person that sm-carve-perf-fv bee hive
    ‘I saw the person who carved the hive’
Harford then goes on to provide examples where a focused DP occurs with a verb marked with relative agreement. A related example is given in (45).

(45) I-MUNTU UJU u-ra-ca-ir-e mwatu
    1-person this rel-pn-carve-perf-fv bee hive
    ‘THIS PERSON carved a bee hive’

Harford uses data such as these to argue that the construction following a fronted focused XP (or wh-phrase) is a relative clause. The presence of the relative clause is taken to motivate a cleft syntax for these constructions. For me, the sentences that contain relative agreement are highly marked (in fact, almost ungrammatical). The fully grammatical sentences contain the subject agreement marker *a* used in regular declarative sentences. This change in subject agreement might actually point to a potential diachronic view for the Kitharaka focus and wh-constructions. That the continued preference for the subject agreement marker *a* as opposed to the relative *u* is a potential indication of the grammaticalization of the Kitharaka focus construction from a biclausal cleft construction to a monoclausal sentence. In fact, Heine and Reh (1983) and Givón (1990) agree that there is a general tendency for focus constructions to change, across languages, from biclausal structures (with a relative clause part) to monoclausal sentences with independent focus marking particles (see also Drubig 2003 for related views and additional references).

To sum up, I have shown in this section that wh-questions in Kitharaka come with a number of morphological properties. One is that overtly moved wh-phrases bear the focus marker, while *in situ* wh-phrases cannot. The other is that present tense verbs crossed by wh-movement bear the tense marker *ku* while those not crossed bear *ri*. Negative verbs require obligatory movement of the wh-phrase. *Without* clauses, the remote past, and negative present tense *ku-marked* verbs, clausemate of a moved wh-phrase, require the negative allomorph *ta*. For the dialect of Kitharaka that Harford investigated, wh-related extractions of subjects may permit change of subject agreement from *a* to the relative *u* (*w* before vowels).

The correlation between changes in verbal morphology and the presence or lack of wh-extraction is not unique to Kitharaka. In Duala, an SVO Bantu lan-
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There is a particle *no* which occurs following the verb of the clause in which the wh-phrase ends up. This particle does not occur with wh-*in situ*. Similarly, in Kikuyu (Clements 1984), wh-movement (and other types of A bar movements) force the subject agreement marker for class 1 (typically, singular human subjects) to change from *a* to *o*. Furthermore, in Kikuyu, the negative form of the verb in declarative sentences is *ti*, while under wh-related extractions (focus, wh, relative clauses), the verbal negation form is *ta*. The distribution of the allomorphs of negation is therefore much more systematic in Kikuyu than in Kitharaka, its close relative. I return to these issues related to verbal morphology later in the paper. For now, I point the main questions raised by the data on questions (also focus) in Kitharaka which require closer investigation.

(46) a. What is the exact syntactic category of the particles *n* and *i* which appear on a fronted wh-phrase and foci?  
b. Why is it that the particles *n* and *i* occur only with wh/ focus movement but never with wh/ focus *in situ*?  
c. Why is the marking of present tense sensitive to the presence, *ku* versus lack, *ri* of wh-related movement?  
d. Why do *ku*-marked verbs, clausemate to a moved wh-phrase, require the negative morpheme *ta* and not *ti*?  
e. Why does negation force wh-movement?  
f. Why is it that the present perfect and the future cannot freely co-occur with the focus marker?  
g. Why does the future disappear in the presence of negation?

As one can easily see, the number of issues raised by the Kitharaka data is more than can be exhaustively discussed in a single paper. This paper will deal mainly with issues (46a-c) and only tentatively speculate on the others. In an attempt to bring the core issues/questions to the fore, I provide in the next section, additional distributional facts of the particles *n* and *i*, by first looking at asymmetries in question formation in Kitharaka and then at multiple questions and long/cyclic wh-movement.


Kitharaka exhibits systematic asymmetries in question formation. An object wh-phrase can be left *in situ* in the postverbal position without a focus marker, as in (12), but a subject wh-phrase cannot appear without a focus marker, whether it
occurs in a simple sentence (cf. (47a) vs. (47b)), or in a complex sentence, as in (48a) vs. (48b).

(47)  a. *Uu a-ring-ir-e Samueli
  who sm-beat-perf-fv Samuel

  b. N-uu <uu> a-ring-ir-e Samueli ‘Who beat Samuel?’
  f-who sm-beat-perf-fv Samuel

(48)  a. *Mary a-ug-ir-e ati uu a-ring-ir-e Samueli
  Mary sm-say-perf-fv that who sm-beat-perf-fv Samuel

  b. Mary a-ug-ir-e ati n-uu <uu> a-ring-ir-e Samueli
  Mary sm-say-perf-fv that f-who sm-beat-perf-fv Samuel
  ‘Who did Mary say beat Samueli?’

The ban on occurrence of a subject wh-in situ holds not only for regular subjects but also for derived subjects (Muriungi 2004). Thus the derived subject of a passive must obligatorily bear the focus marker, as in (49).

(49)  *Uu a-kis-ir-w-e i-Karimi ‘Who was kissed by Karimi?’
  who sm-kiss-perf-pass-fv by-Karimi

  N-uu <uu> a-kis-ir-w-e i-Karimi
  F-who sm-kiss-perf-pass-fv by-Karimi

Subject foci must therefore always be moved. We know that the subject wh-phrase has been moved because like a moved wh-object (11), the subject wh-phrase bears a marker, n-. The subject wh-phrase therefore obligatorily vacates the subject position in Kitharaka.

The ban on the occurrence of a wh-phrase in the subject position is a robust crosslinguistic generalization holding for languages such as Kikuyu (Bergvall 1987), Dzamba (Bokamba 1976), Kinyarwanda (Maxwell 1981), Zulu (Sabel and Zeller, 2002, 2004), Malagasy (Sabel 2003) and Tagalog (Richards 1997). In fact the ban on occurrence of a wh-phrase in the subject position follows from a more general condition prohibiting the occurrence of a focus in the subject position. Thus a subject DP cannot be focused in situ. (50b) is therefore not a felicitous answer to the subject wh-question in (50a). The felicitous answer must have the
subject focus string-vacuously moved and therefore marked with the particle *i* as in (50c) (see also Green and Jaggar 2003 footnote 17, and references cited therein for related restrictions on subject foci in Hausa, Miya and Somali). 5

(50) a. **I-mbi** y-urag-ir-e nkamiira
    f-what sm-kill-perf-fv camel
    ‘What killed the camel?’

b. *NJOGU y-urag-ir-e nkamiira
   elephant sm-kill-perf-fv camel

c. I-NJOGU <njogu> y-urag-ir-e nkamiira
   F-elephant sm-kill-perf-fv camel
   ‘THE ELEPHANT killed the camel’

Note, however, that a logical subject can be questioned in place when it is postverbal in locative inversion structures.

(51) Mbaa ino ku-in-ag-a **ba-o**
    bar this sm-sing-hab-fv who
    ‘Who sings in this bar?’ (Question)

    Mbaa ino ku-in-ag-a TUARI TUTHONGI MUNO
    bar this sm-sing-hab-fv girl beautiful very
    ‘In this bar sings VERY BEAUTIFUL GIRLS’ (Answer)

Data such as (51) actually show that that the postverbal position is a real focus position in Kitharaka. This piece of data also shows that the failure of the subject

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5 The incompatibility of the subject position and the focus has a long history. Thus Givón (1976) has demonstrated that in subject-prominent languages, subjects are associated with topic functions such as referentiality and definiteness. Givón (1976) has further argued that subjects in languages with strong subject verb agreement are the end result of a grammaticalization process where the subject, originally a topic, got reanalyzed as the subject of the sentence. In a similar vein, it has been claimed that subject agreement in languages with strong subject agreement is a result of a diachronic process where a pronoun, originally expressing anaphoric agreement with a dislocated topic, got reassigned a subject agreement function (cf. Bresnan and Mchombo 1987 and references cited therein).
to be questioned in place when it occurs in non-inverted structures is related to the properties of the syntactic position it occupies (see footnote 5).

Another asymmetry, also crosslinguistically attested, is observed with Kitharaka adverbs. Place and time wh-adjuncts can be left *in situ*, as in (52). However, manner and reason wh-adjuncts cannot, as in (53). They must always be moved and therefore be focus marked; see (54).6

(52) Victor a-thi-ir-e **ku**
    Victor sm-go-perf-fv where

    Victor a-thi-ir-e **ri**
    Victor sm-go-perf-fv when

   ‘Where did Victor go?’
   ‘When did Victor go?’

(53) *U-ri **ata**
    2nd sg-be how

   *U-ri-ring-a **mwana mbi nontu**
    2nd sg-pres-beat-fv child why

   ‘How are you?’
   ‘Why are you beating the child?’

(54) **N-ata u-ri <ata>**
    f-how 2nd sg-be

    **I-mbi nontu u-ku-ring-a **mwana <mbi nontu>**
    f-why 2nd sg-pres-beat-fv child

   ‘How are you?’
   ‘Why are you beating the child?’

Finally, while extraction of argument wh-phrases across a *whether* wh-island produces an acceptable sentence in Kitharaka, extraction of manner and reason wh-phrases produces a very marginal sentence.

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6 See also Tsai (1994) for related observations for Chinese and Sabel (2003) for Malagasy. The ban on the *in situ* occurrence of manner and reason wh-phrases has been attributed to the fact that they lack a position for a variable (cf. Reinhart 1993, Chomsky 1995). Such wh-phrases must therefore move to create an operator-variable set-up which is necessary for interpretation. On the other hand, argument wh-phrase have a position for a variable and can therefore be interpreted by being co-indexed and c-commanded by the higher scopal position, a mechanism referred to as unselective binding (see Chomsky 1995).
(55) a. **N-uu** u-ku-ama kethira Victor n-a-thok-ir-i-e  
    f-who 2\textsuperscript{nd} sg-pres-wonder whether Victor f-sm-invite-perf-vs-fv  
    ‘Who do you wonder whether Victor invited?’\(^7\)

b. **N-uu** u-ku-ama kethira n-a-thok-ir-i-e Maria  
    f-who 2\textsuperscript{nd} sg-pres-wonder whether f-sm-invite-perf-vs-fv Maria  
    ‘Who do you wonder whether s/he invited Maria?’

c. **N-ata** u-ku-ama kethira n-a-kar-ir-e <ata>  
    f-what 2\textsuperscript{nd} sg-pres-wonder whether f-sm-behave-perf-fv  
    ‘How do you wonder whether s/he behaved?’

The standard explanation for the patterns of ungrammaticality in the sentences in (55) has been that since wh-arguments have a referential index, their traces can be licensed through binding, a syntactic relation that can occur at a distance (Rizzi 1990). On the other hand, since manner wh-adjuncts never contain a referential index, the only way for their trace to be properly licensed is through antecedent government, a syntactic relation requiring local chain links. The establishment of local chain links in (55c) is barred by the intervening A’ specifier (occupied by whether). How therefore never gets to antecedent-govern its trace, because it is too far away; (55c) thus crashes (cf. Rizzi 1990).\(^8\) Otherwise stated, nonreferential phrases such as how can only undergo cyclic wh-movement while referential ones are okay with long wh-movement (cf. Cinque 1990).

5. **Multiple Questions.**

Multiple questions in Kitharaka are possible as long as four requirements are met.

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\(^7\) For reasons of space, I give only sentences with an object wh-phrase and a manner wh-adjunct. The reader is referred to Muriungi (2003) for more data on extraction from islands including extractions from Complex NPs.

\(^8\) Other factors that have been invoked to explain the acceptability of extraction of argument including time and place wh-phrases over manner and reason wh-adjuncts from weak islands include their DP hood, case, individuation and richness in internal structure (see Starke 2001 and references cited therein).
(56) a. Subject, manner, and reason wh-phrases always be moved (see the asymmetries)  
b. Moved wh-phrases bear the focus particle (the usual requirement)  
c. Only one wh-phrase is moved to the wh-Spec position, Spec FocP for Kitharaka (see section 9).  
d. When two wh-phrases are left in situ, this should respect the order: Indirect object>Direct object>Place adjunct>Time adjunct

I demonstrate these patterns with a few examples.

(57) N-uu <uu> a-gur-lr-e mbi  
f-who sm-buy-perf-fv what  
‘Who bought what?’

*I-mbi uu a-gur-lr-e <mbi>  
f-what who sm-buy-perf-fv  
‘What did who buy?’

*N-uu i-mbi <uu> a-gur-ir-e<mbi>  
f-who f-what sm-buy-perf-fv  
‘Who bought what?’

(58) Ta-mb-ir-a i-mbi nontu Munene a-thi-ir-e ku <mbi nontu>  
just-1st sg-tell-fv f-why Munene sm-go-perf-fv where  
‘Tell me why Munene went where?’

*Ta-mb-ir-a i-ku Munene a-thi-ir-e <ku> mbi nontu  
just-1st sg-tell-fv f-where Munene sm-go-perf-fv why  
‘Tell me why Munene went where?’  
(Reason wh-adjunct not moved)

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9 There is a greater preference for not leaving more than two wh-phrases in situ.
(59) Ta-mb-i r-a n-ata Munene a-i k-i r-e mbi <ata>
just-1st sg-tell-fv f-how Munene sm-put-perf-fv what
‘Tell me how Munene put/fixed what?’

??Ta-mb-i r-a i-mbi Munene a-i k-i r-e <mbi> ata
just-1st sg-tell-fv f-what Munene sm-put-perf-fv how
‘Tell me what Munene put/fixed how?’ (Manner wh-adjunct not moved)

(60) Munene a-gur-i r-e mbi ku
Munene sm-buy-perf-fv what where
‘What did Munene buy where?’

I-mbi Munene a-gur-i r-e <mbi> ku
f-what Munene sm-buy-perf-fv where
‘What did Munene buy where?’

I-ku Munene a-gur-i r-e mbi <ku>
f-where Munene sm-buy-perf-fv what
‘Where did Munene buy what?’

5.1 A prediction. The conditions in (56a-c) predict that there should be no direct way of saying ‘why did who leave?’ as both the reason wh-adjunct and the subject wh-phrase require being moved, and only one wh-phrase can be moved to the wh-Spec position. This prediction is correct. The only sensible way to ask this question is to have two conjoined wh-questions.

(61) N-uu a-th-i r-e na i-mbi nontu a-th-i r-e
f-who sm-go-perf-fv and f-why sm-go-perf-fv
‘Who went and why did he/she go?’

5.2. An apparent counterexample to (56a-c). There is one sentence type that appears to go against the generalization in (56a-c). This sentence contains a subject without F-marking, and another wh-phrase moved to its left, which bears the focus marker, as in (62a). The subject cannot appear with focus marking, see (62b), and neither can the wh-subject appear in front of the wh-object, as in (62c). Importantly, the subject wh-phrase cannot occur in situ in the absence of the

10 I thank David Odden for bringing this prediction to my attention.
fronted focus-marked object wh-phrase, as in (62d). A sentence with a fronted subject wh-phrase and an *in situ* object wh-phrase is okay, as in (62e).

(62)  

a. N-ibuku *ririku* kaana kariku ga-tembur-ir-e  
   f-book which child which sm-tear-perf-fv  
   ‘Which book did which child tear?’

b. *N-ibuku* ririku i-kaana kariku ga-tembur-ir-e  
   f-book which f-child which sm-tear-perf-fv  
   ‘Which book did which child tear?’

c. *I-kaana* kariku ibuku *ririku* ga-tembur-ir-e  
   f-child which book which sm-tear-perf-fv  
   ‘Which book did which child tear?’

d. *Kaana* kariku ga-tembur-ir-e ibuku *ririku*  
   child which sm-tear-perf-fv book which  
   ‘Which child tore which book?’

e. I-kaana kariku ga-tembur-ir-e ibuku *ririku*  
   f-child which sm-tear-perf-fv book which  
   ‘Which child tore which book?’

For reasons of space, I will not discuss these patterns here, nor will I provide the full paradigm. But the basic facts are as follows. Constructions of the type in (62a) are acceptable when the subject wh-phrase is D-linked.\(^1\) Thus the sentence would be ungrammatical if *which child* was replaced by bare *who*. The example in (62d) is instructive. Even though D-linked, a subject wh-phrase cannot be left *in situ*. We are forced to make one conclusion here. The subject wh-phrase attracts the object wh-phrase, which attaches to its left. The whole cluster then moves to the wh-Spec position in Kitharaka, Spec FocP (see section 9). Otherwise put, the only reason why the subject wh-phrase appears as though it is *in situ* is because it is moved as part of a wh-cluster (for recent ideas on wh-cluster formation, see Sabel 2003, 2001, Grewendorf 2001).

\(^1\) A wh-phrase is Discourse-linked when the speaker and hearer know or have in mind a specific set of alternatives from which the answer to the question can be picked form (cf. Pesetsky 1987).

All categories of wh-phrases in Kitharaka can be moved from an embedded sentence to the initial position of the matrix sentence. This kind of movement comes with two requirements, first, that the moved wh-phrase bears the particle \( n \) or \( i \), and second that all the verbs in the embedded clauses which the wh-phrase passes through bear the particle \( i \) or \( n \), except the verb of the clause in which the wh-phrase occurs (Muriungi 2003, 2004).

\( (63) \)  
\[
\text{N-uu u-ku-thugania ati}^{12} \text{ John } n-a-ug-ir-e \text{ Lucy} \\
\text{f-who } 2^{\text{nd}} \text{sg-pres-think that John } f-sm-\text{say-perf-fv Lucy} \\
\text{n-a-ring-ir-e } <\text{uu}> \\
\text{f-sm-\text{beat-perf-fv}}
\]

‘Who do you think that John said Lucy beat?’ (Object)

\[
\text{N-uu u-ku-thugania ati } \text{ John } n-a-ug-ir-e \text{ Lucy } n-a-ug-ir-e \\
\text{f-who } 2^{\text{nd}} \text{sg-pres-think that John } f-sm-\text{say-perf-fv Lucy } f-sm-\text{say-perf-fv} \\
\text{ati } <\text{uu}> \text{ n-a-ring-ir-e } \text{ Tomu} \\
\text{that } f-sm-\text{beat-perf-fv } \text{ Tom}
\]

‘Who do you think that John said Lucy said beat Tom?’ (Subject)

---

12 Any of the embedded CPs may or may not have a complementizer, whether there is an immediately following subject trace or not. Kitharaka does not therefore have that trace effects. This is already expected because since Perlmutter (1971) it has been known that most null subject languages (Kitharaka is one) do not portray any asymmetries with respect to wh extraction across overt complementizers. The general approach to lack of that trace effects is that since (Bantu) pro drop languages have strong agreement, then this agreement properly licenses the subject trace in Spec AgrsP through the usual Spec head agreement (see Biloa 1995). See, however, Rizzi (1990) for an explanation based on the possibility of extraction from the inverted subject position (for pro drop languages) and variation in the governing properties of null versus overt C (for languages like English).
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(64) **I-ku** u-ku-thugania ati chibu n-a-ug-ir-e borisi
f-where 2nd sg-pres-think that chief f-sm-say-perf-fv police

  n-i-on-ir-e  Lawrence <ku>
f-sm-see-perf-fv  Lawrence

‘Where do you think that the chief said the police saw Lawrence?’

**I-ri** u-ku-thugania ati chibu n-a-ug-ir-e borisi
f-when 2nd sg-pres-think that chief f-sm-say-perf-fv police

  n-i-thaik-ir-e  Lawrence <ri>
f-sm-arrest-perf-fv  Lawrence

‘When do you think that the chief said the police arrested Lawrence?’

(65) **I-mbi nontu** chibu a-ug-ir-e borisi n-i-thaik-ir-e
f-why chief sm-say-perf-fv police f-sm-arrest-perf-fv

  Lawrence  <mbi nontu>

‘Why did the chief say the police arrested Lawrence?’

**N-ata** chibu a-ug-ir-e borisi n-i-thaik-ir-e
f-how chief sm-say-perf-fv police f-sm-arrest-perf-fv

  Lawrence  <ata>

‘How did the chief say the police arrested Lawrence?’

The marking of verbs with focus markers occurs not only when there is long wh-movement, but also when there is long DP, AdvP, PP, VP and AdjP focus movement. An example with an object DP will demonstrate this.

(66) **N-INGOI** u-ku-thugania ati John n-a-ug-ir-e Lucy
f-donkey 2nd sg-pres-think that John f-sm-say-perf-fv Lucy

  n-a-ring-ir-e  <ingoi>
f-sm-beat-perf-fv

‘Its is A DONKEY you think that John said Lucy beat’
Example (66) reminds us of the familiar parallelism between focus and wh-movement (cf. Kiss 1995).

While focus markers occur on the embedded verbs when there is long wh-movement, they cannot occur with wh/ focus in situ.\textsuperscript{13} Examples (67) and (68) show embedded wh-in situ and focus occurring without preverbal focus marking.

(67) U-ri-thugania ati John a-ug-ir-e Lucy a-ug-ir-e  
2\textsuperscript{nd} sg-pres-think that John sm-say-perf-fv Lucy sm-say-perf-fv  
Pat a-ring-ir-e uu  
Pat sm-beat-perf-fv who  

‘Who do you think that John said Lucy said Pat beat?’

U-ri-thugania ati chibu a-ug-ire borisi y-on-ir-e  
2\textsuperscript{nd} sg-pres-think that chief sm-say-perf-fv police sm-see-perf-fv  
Lawrence ku  
Lawrence where  

‘Where do you think that the chief said the police saw Lawrence?’

U-ri-thugania ati chibu a-ug-ir-e borisi i-thaik-ir-e  
2\textsuperscript{nd} sg-pres-think that chief sm-say-perf-fv police sm-arrest-perf-fv  
Lawrence ri  
Lawrence when  

‘When do you think that the chief said the police arrested Lawrence?’

\textsuperscript{13} There is one exception to this general pattern: echo questions.

(i) N-u-ku-thugania ati John n-a-gur-ir-e mbi  
f-2\textsuperscript{nd} sg-pres-think that John f-sm-buy-perf-fv what  
‘You think John bought what!’

Sentence (i) is appropriate in this context: John has two wives. Wife A tells Wife B that John bought a kilo of meat. Wife B starts to complain, suspecting that John might have bought two kilos of meat. Wife A responds with (i), meaning ‘why the hell don’t you believe me!’ This sentence breaks all the observations we have made so far regarding the distribution of the focus marker. For example, the focus marker occurs with an in situ wh-phrase (but note, an echo one!). In addition the sentence breaks the observation that embedded wh-in situ does not co-occur with any focus marker on the verbs. I will not discuss such examples in this paper.
(68) U-ri-thugania ati John a-ug-ir-e Lucy (DP in situ focus)

2\textsuperscript{nd} sg-pres-think that John sm-say-perf-fv Lucy
a-ug-ir-e Pat a-ring-ir-e INGOI
sm-say-perf-fv Pat sm-beat-perf-fv donkey

‘You think that John said Lucy said Pat beat A DONKEY’

The data in (69) and (70) demonstrate that in situ wh-phrases and foci cannot occur with preverbal focus marking.

(69) *U-ri-thugania ati John n-a-ug-ir-e ati Lucy n-a-ug-ir-e

2\textsuperscript{nd} sg-pres-think that John f-sm-say-perf-fv that Lucy f-sm-say-perf-fv
ati Pat n-a-ring-ir-e uu
that Pat f-sm-beat-perf-fv who

‘Who do you think that John said Lucy said Pat beat?’

*U-ri-thugania ati chibu n-a-ug-ir-e borisi n-i-on-ir-e

2\textsuperscript{nd} sg-pres-think that chief f-sm-say-perf-fv police f-sm-see-perf-fv
Lawrence ku
Lawrence where

‘Where do you think that the chief said the police saw Lawrence?’

*U-ri-thugania ati chibu n-a-ug-ir-e borisi n-i-thaik-ir-e

2\textsuperscript{nd} sg-pres-think that chief f-sm-say-perf-fv police f-sm-arrest-perf-fv
Lawrence ri
Lawrence when

‘When do you think that the chief said the police arrested Lawrence?’

(70) *U-ri-thugania ati John n-a-ug-ir-e ati (DP focus in situ)

2\textsuperscript{nd} sg-pres-think that John f-sm-say-perf-fv that
Lucy n-a-ug-ir-e ati Pat n-a-ring-ir-e INGOI
Lucy f-sm-say-perf-fv that Pat f-sm-beat-perf-fv donkey

‘You think that John said Lucy said Pat beat A DONKEY’

The particles $n$ and $i$ therefore seem to be involved in marking points in the sentence structure where the wh-phrase stops on its way to the final landing site.
Further evidence for this claim comes from the observation that when there is partial and intermediate wh-movement in embedded clauses, particle marking only occurs on the verbs that are between the gap of the moved wh-phrase and the wh-phrase, never on the verb(s) of the clause(s) above the wh-phrase.

(71) U-ri-thugania ati **n-uu** John a-uug-ir-e Lucy n-a-ring-ir-e <uu>
2\textsuperscript{nd} sg-pres-think that f-who John sm-say-perf-fv Lucy f-sm-beat-perf-fv
‘Who do you think that John said Lucy beat?’

*U-u-ri-thugania ati **n-uu** John a-uug-ir-e
f-2\textsuperscript{nd} sg-pres-think that f-who John sm-say-perf-fv
Lucy n-a-ring-ir-e <uu>
Lucy f-sm-beat-perf-fv
‘Who do you think that John said Lucy beat?’

(72) U-ri-thugania ati John **n-uu** a-uug-ir-e Lucy n-a-uug-ir-e <uu>
2\textsuperscript{nd} sg-pres-think that John f-who sm-say-perf-fv Lucy f-sm-say-perf-fv
n-a-ring-ir-e Tomu?
f-sm-beat-perf-fv Tom
‘Who do you think that John said Lucy said beat Tom?’

*U-u-ri-thugania ati John **n-uu** a-uug-ir-e
f-2\textsuperscript{nd} sg-pres-think that John f-who sm-say-perf-fv
Lucy n-a-uug-ir-e <uu> n-a-ring-ir-e Tomu?
f-sm-say-perf-fv f-sm-beat-perf-fv Tom
‘Who do you think that John said Lucy said beat Tom?’ (Subject)

While facts from long, partial, and intermediate wh-movement point in the direction that the markers *i* and *n* are associated with cyclicity, there is a potential objection for this, arising from sentences such as in (73). In (73a), the matrix verb has an applicative marker; therefore, it requires an applied object which is *Mukothima*. As in most other Bantu languages, there is a requirement that the applied object occurs adjacent to the verb. (73b), with the applied object in the sentence final position, is therefore ungrammatical.
We are certain, therefore, that in (73) the origin of the locative is the matrix clause. With wh-movement, we expect no focus marker on the verb of the embedded clause since no cyclic movement occurs through it. The example in (74), however, appears to go against this prediction.

(74) I-ku Kaburi a-ug-i-ir-e <ku> ati Muthuuri n-a-ca-ir-e
f-where Kaburi sm-say-appl-perf-fv that Muthuuri f-sm-carve-perf-fv
mwatu Marimanti
beehive Marimanti

‘Where did Kaburi say that Muthuuri carved a bee hive at Marimanti?’

(74) does not actually constitute a counterexample to the generalization that focus markers indicate cyclic movement. What (74) demonstrates is that the focus marker, other than marking cyclicity, has another function: that of indicating focus of various types. In (74) above, the focus marker indicates that the lower sentence is an all information focus sentence (cf. section 1). In other words, the embedded sentences in (74) is a sentence that would normally answer an S-question such as what happened?.

One way of achieving the predicted marking of cyclicity is to control for the situation in (74), so that in addition to wh-focus, we also have another embedded focus domain which does not involve any movement. Kitharaka in situ object focus is an ideal scenario for testing this.
(75) a. **I-ku** Kaburi a-ug-i-ir-e <ku> ati Muthuuri a-ca-ir-e
f-where Kaburi sm-say-appl-perf-fv that Muthuuri sm-carve-perf-fv
    MWATU Marimanti
    beehive Marimanti

‘Where did Kaburi say that Muthuuri carved a BEEHIVE at Marimanti?’

b. *I-ku* Kaburi a-ug-i-ir-e <ku> ati Muthuuri n-a-ca-ir-e
f-where Kaburi sm-say-appl-perf-fv that Muthuuri f-sm-carve-perf-fv
    MWATU Marimanti
    beehive Marimanti

‘Where did Kaburi say that Muthuuri carved a BEEHIVE at Marimanti?’

c. *I-ku* Kaburi n-a-ug-i-ir-e <ku> ati Muthuuri a-ca-ir-e
f-where Kaburi f-sm-say-appl-perf-fv that Muthuuri sm-carve-perf-fv
    MWATU Marimanti
    beehive Marimanti

‘Where did Kaburi say that Muthuuri carved a BEEHIVE at Marimanti?’

In (75b), the focus marker cannot occur in the most deeply embedded clause because there is no focus movement. In (75c), the focus marker can also not occur in the matrix clause because there are never two focus markers in the same clause (see section 9 for a structural explanation).

In light of this conclusion, consider (76).

(76) a. **I-ku** John a-ug-ir-e ati Kaburi n-a-ug-i-ir-e <ku>
    f-where John sm-say-perf-fv that Kaburi f-sm-say-appl-perf-fv
    ati Muthuuri a-ca-ir-e MWATU Marimanti
    that Muthuuri sm-carve-perf-fv beehive Marimanti

‘Where did John say that Kaburi said that Muthuuri carved a BEEHIVE at Marimanti?’

‘Where did John say that Kaburi said that Muthuuri carved a BEEHIVE at Marimanti?’

The focus marker can occur in the middle clause in (76a) because this is the embedded clause in which the wh-phrase *when* originates. The focus marker cannot, however, occur in the most deeply embedded sentence, because no movement has occurred, as in (76b).

Consider next an even more problematic case. In (77a), the wh-phrase has moved from the most embedded clause, and as predicted, there is overt focus marking. In (77b), however, where there is an *in situ* focus in the second embedded sentence, the focus marker cannot appear, even though the wh-phrase has been extracted from a clause lower than that of the *in situ* non-wh focus.

(77) a. I-mbi u-ku-thugania ati Mary n-a-ra-ir-e Makena igoro f-what 2nd sg-pres-think that Mary f-sm-pn-tell-perf-fv Makena yesterday ati Gatundu n-a-a-ij-ir-e mwanka muthiru <mbi> that Gatundu f-sm-pr-steal-perf-fv year finished

‘What do you think that Mary told Makena yesterday that Gatundu stole last year?’

b. I-mbi u-ku-thugania ati Mary (*n*)-a-ra-ir-e MAKENA f-what 2nd sg-pres-think that Mary sm-pn-tell-perf-fv Makena IGORO ati Gatundu n-a-a-ij-ir-e <mbi> mwanka muthiru yesterday that Gatundu f-sm-pr-steal-perf year finished

‘What do you think that Mary told MAKENA YESTERDAY that Gatundu stole last year?’

The obligatory absence of the focus marker in the embedded clause is understandable. The absence of the preverbal focus marker indicates that a post-verbal element is in focus. In (77b) *Makena* and *yesterday* are the focus. The focus status of these two phrases can be established by building a Kitharaka sentence that has phrases which contrast with focused ones in (77b), ‘What do you think that Mary
told MAKENA YESTERDAY, as opposed to telling MUNENE LAST WEEK that Ga­
tundu stole. The presence of the focus marker (77b) would obscure the fact that ‘Makena’ and ‘yesterday’ are the focus. Intuitively, therefore, there is a conflict between conveying a focusing reading and conveying cyclicity effects; the fo­cusing effect wins. I assume therefore that even in cases such as (77b), wh-movement occurs cyclically—only now, cyclic marking cannot occur because of the conflict.

I take it, therefore, that the morphemes i and n may, but do not obligatorily, mark cyclic movement.

(78) i and n may mark cyclicity14

Having shown the distribution and the functions of the particles i and n, we are now in a position to address question (46a):

(46) a. What is the exact syntactic category of the particles n and i which ap­pear on a fronted wh-phrase and foci?

7. The Status of the Kitharaka Particles n and i.

It is crucial that we determine the exact syntactic category of the particle n/i be­cause this will influence the structure to be assigned to Kitharaka focus construc­tions. Note for example that if it were established that these particles are copular verbs, this would make a biclausal cleft analysis of Kitharaka wh-questions al­most automatic, with the added assumption that the subject of the upper clause is occupied by a pleonastic similar to it in English (cf. Bergvall 1987).

It has been argued in prior studies that the Kitharaka particles n and i are copular verbs which function as auxiliaries (Mbeeria 1993: 89 footnote 12). Har­ford (1997) calls these particles predicative. I think these particles are better ana­lyzed as focus particles. Let us investigate more closely the distribution of these particles.

I already demonstrated that the Kitharaka particles n and i are not restricted to wh-questions. They also occur in the preverbal position in declarative sen-

14See McCloskey (1979, 2000, 2002), and Torrego (1983, 1984) for a variety of other ways through which cyclicity is conveyed for example by quantifier float in embedded Spec CPs (West Ulster English), changes in the complementiser (Irish) and subject verb inversion ef­fects (Spanish).
tences, as in (79), in the pre-predicate position in copular constructions (80), and attached to a fronted XP in focus constructions, as in (81).

(79) Bernardo n-a-nyu-ir-e iria ‘Bernardo drank milk’
    Bernardo f-sm-drink-perf-fv milk
    Kiura i-ki-r-ir-e mati ‘The frog ate leaves.’
    Frog f-sm-eat-perf-fv leaves

(80) Karimi i-MUBIASARA ‘Karimi is A BUSINESSWOMAN’
    Karimi f-business woman
    David n-OBISA ‘David is AN OFFICER’
    David f-officer

(81) i-MATI kiura ki-r-ir-e <mati> ‘The frog ate LEAVES’
    f-leaves Frog sm-eat-perf-fv
    N-IRIA Bernardo a-nyu-ir-e <iria> ‘Bernardo drank MILK’
    f-milk Bernardo sm-drink-perf-fv

All the sentences in (79-81) have a focused constituent. We can determine whether there is a focus in these sentences by using the familiar method of question-answer pairs. The sentences in (79) can be used as an answer to a VP question (what did Bernardo do? what did the frog do?), or an S-question (what happened?). The sentences in (80) are appropriate for a question that asks about the predicate (what kind of work does Colomba/David do?). The sentences in (81), on the other hand, can be answers to an object question (what did the frog eat?, what did Bernardo drink?) or a VP question (what did the frog do? what did Bernardo do?). Note that from these patterns of question-answer pairs, we can conclude that focus projects in Kitharaka. Observe also that the fact that focus projects makes a cleft analysis of the Kitharaka focus construction impossible. It is a well-known pattern among languages that a cleft focus cannot project (cf. Schwarz 2003). Thus in English, (82a) and (82b) are not a felicitous question-answer pair.

(82) a. What did Bernardo do?
    b. # It is milk that Bernardo drank
Since for Kitharaka, a sentence with a fronted particle-marked object can be used for VP focus, it doesn’t seem like we are dealing with a cleft construction. Furthermore, Schwarz (2003) claims, following a suggestion by Anna Szabolcsi (pc) that crosslinguistically, it is very uncommon for clefts to participate in multiple questions:

(83) *Who is it that sold what?

(84) *Wer ist es, der was verkauft hat  \hspace{1cm} \text{(Schwarz 2003: 61)}

We saw for Kitharaka that constructions with the particles \textit{n} and \textit{i} participate in multiple questions (section 5). This is again evidence that we might not be in the vicinity of a cleft. The absence of a cleft analysis of the Kitharaka focus construction makes it very unlikely that the particles \textit{n} and \textit{i} are copulas. This is, however, not all there is to say about these particles. The distributional facts from the copular paradigm show that \textit{n} and \textit{i} cannot be copular verbs. There is also syntactic evidence from co-occurrence patterns with negation that strongly suggests that \textit{n} and \textit{i} can only be focus-marking elements. I turn to these facts in the next section.

7.1. The distribution of the copula in the present and past tenses. The copular verb in Kitharaka varies with the person and tense. Below, I provide the copula as it is used with different persons in the present and past tenses.

| Table 1: Forms of the copular verb in Kitharaka (given in IPA) |
|---|---|---|---|---|
| 1\textsuperscript{st} | n-de | to-re | nd-a-re | to-a-re |
| 2\textsuperscript{nd} | o-re | b\text{o}-re | w-a-re | b\text{o}-a-re |
| 3\textsuperscript{rd} | ?i/n | ?i/n | a-a-re | b\text{a}-a-re |
|       | a-re | b\text{a}-re |

Descriptively, the copular verb in Kitharaka consists of three parts; a part that marks person and number, a part that marks tense, and a part that represents the ‘be’ reading (re).

(85) Person/Number>Tense>Be
The present tense form of the copula does not have overt tense inflection.

If we assume that *n/i* is the third person present tense copula, the pattern observed with other copulas breaks. First, the third person copula will not conform to the pattern in (85), as there is no part that resembles ‘be’ (*re*). Secondly, the past forms will appear as though they do not derive from the present forms, contra what can be seen for the other copulas. One might then wonder whether there are forms that the past forms could be said to be derived from. The answer is positive: there exist forms such as *ari* and *bari*. These forms are used to show location, accompaniment and possession. The locative use is exemplified in (86) and (87).

(86) Munene a-ri ikumbi-ni ‘Munene is in the granary’
Munene sm-be granary-loc

(87) Munene na Mfana ba-ri ikumbi-ni
Munene and Mfana sm-be granary-loc
‘Munene and Mfana are in the granary’

The particles *n* and *i* cannot therefore be copular verbs because they do not fit the copular paradigm. In light of this conclusion, and the data in table 1, consider the sentences in (88).

(88) a. Colomba I-MWARIMU ‘Colomba is A TEACHER’
Colomba f-teacher

b. Colomba n-a-a-re mwarimu ‘Colomba was a teacher’
Colomba f-sm-pr-be teacher

In (88a) the ‘copula’ occurs between the two NPs. (88b) shows that a past tense copula can co-occur with *n*. This is straightforward evidence that *n* cannot be a copula.

(89a) and (89b) are even more problematic for an approach that treats *n* and *i* as a copula because we have *i* co-occurring with the 1st person copula (cf. Table 1).
(89) a. *I-to-re arimu ka ‘We are real teachers’
f-1st pl-be teachers really

b. *I-n-de mwarimu ka ‘I am a real teacher’
f-1st sg-be teacher really

c. *I-n obisaa ka ‘He/she is a real officer’
f- is? officer really

Note that while *n can co-occur with a genuine 3rd person copula in the past tense, as in (88b), co-occurrence is never possible between *i and *n (89c). Assuming *n to be our phonologically determined copula in (89c), that is, *n occurs when the immediately following word begins with a vowel and *i when it begins with a consonant, the failure of *i and *n to co-occur already goes against the pattern observed in (89a) and (89b) where *i can occur before other copulas. (89c) is only grammatical in the absence of *i. From this mismatch between the behaviour of *i and *n on the one hand, and other copulas on the other, it seems reasonable to conclude that *n and *i are not performing a copular verb function.

It should be noted here that the forms in (89a) and (89b) can occur without *i, as in (90). It is therefore not the case that these copular verb forms are tied to the presence of these particles.

(90) to-re arimu ka ‘We are real teachers’
1st pl-be teachers real

n-de mwarimu ka ‘I am a real teacher’
1st sg-be teacher real

The fact that the particles *n and *i play a different role from the copula can also be seen from the interaction of the focus particle and the negative morpheme.

15David Odden has pointed out to me that (89c) could be ruled out on purely phonological grounds, by the ban on word-final codas. Note, however, that if *n was our phonologically determined form of the copula, and there was a language internal requirement that only the focus marker *i can precede this form of the copula, nothing would prevent the insertion of a vowel after *n to create a syllable with the form CV. In fact, vowel insertion is a regular syllabification process done to most borrowed words in Kitharaka in order to create good syllabic units and it is hard to see how such a process could only be constrained to apply to borrowed words.
The observation in Kitharaka is that the focus marker and the negative morpheme occur in complementary distribution. Thus in (91c) where the focus particle co-occurs with negation, the sentence is completely unacceptable. The ungrammaticality occurs whether the *ti* or the *ta* allomorph of negation is used. Note that while the focus marker precedes the subject prefix (91a), the negative morpheme occurs after the subject prefix (91b). The ungrammaticality of (91c) cannot therefore be attributed to the claim that negation and focus are competing for the same syntactic position, and neither can it be based on the allegation that the wrong form of negation has been used.

(91)  
a. Paul *n-a-rug-ir-e* nkima ‘Paul cooked food’  
Paul  f-sm-cook-perf-fv  food  
  
b. Paul a-*ti-ra-rug-a* nkima ‘Paul did not cook food’  
Paul  sm-neg-pn-cook-fv  food  
  
c. *Paul n-a-*ti/*ta-ra-rug-a* nkima ‘Paul did not cook food’  
Paul  f-sm-neg-pc-cook-fv  food  

A similar restriction also holds for the predicative copular sentences. The focus marker obligatorily disappears when negation is added (cf. (92-94)).

(92) Colomba *i-*mwarimu ‘Colomba is a teacher’  
Colomba  f-teacher  
  
David *n-obisa* ‘David is an officer’  
David  f-officer  
  
Colomba *n-a-a-ri* mwarimu (Only the focus marker present)  
Colomba  f-sm-pr-be  teacher  ‘Colomba was a teacher’  
  
(93) a. Colomba *ti-*mwarimu ‘Colomba is not a teacher’  
Colomba  neg-teacher  

b. David  \( t^{16}\)-obisa 'David is not an officer'
    David  neg-officer

c. Colomba a-ta-a-ri mwarimu (Only negation is present)
    Colomba  sm-neg-pr-be teacher
    'Colomba was not a teacher'

\begin{align*}
(94) & \quad \ast \text{Colomba } n-ti-mwarimu 'Colomba is not a teacher' \\
& \quad \text{Colomba } f-neg-teacher
\end{align*}

\begin{align*}
\ast \text{David } n-t-obisa & \quad 'David is not an officer' \\
& \quad \text{David } f-neg-officer
\end{align*}

\begin{align*}
\ast \text{Colomba } n-a-ta-a-ri mwarimu \text{ (Negations and focus)} \\
& \quad \text{Colomba } f-sm-neg-pr-be teacher
\end{align*}

'Colomba was not a teacher'

Note that when there is a genuine copula, it remains intact after negation, as in (93c). This pattern also obtains for the other persons.

\begin{align*}
(95) & \quad n-de \text{ muritwa} \quad \text{(Non-negated sentence)} \\
& \quad 1^{st} \text{ sg-be student} \\
& \quad 'I am a student'
\end{align*}

\begin{align*}
& \quad n-ti-re \text{ muritwa} \quad \text{(Negated sentence)} \\
& \quad 1^{st} \text{ sg-neg-be student} \\
& \quad 'I am not a student'
\end{align*}

\begin{align*}
(96) & \quad o-re \text{ muritwa} \quad \text{(Non-negated sentence)} \\
& \quad 2^{nd} \text{ sg-be student} \\
& \quad 'You are a student'
\end{align*}

\begin{align*}
& \quad o-ti-re \text{ muritwa} \quad \text{(Negated sentence)} \\
& \quad 2^{nd} \text{ sg-neg-be student} \\
& \quad 'You are not a student'
\end{align*}

\(^{16}\) The [i] that forms part of the negative morpheme deletes in this example.
An approach that takes \( n \) and \( i \) to be copular verbs would be hard-pressed to explain why the copular cannot co-occur with negation. One the other hand, an approach like ours which takes the particles to be focus markers has a simple answer: the failure of co-occurrence is semantic. Both the focus particles and negation have a focusing function, therefore negation cannot occur under the scope of the focus marker. In fact, Marchese (1983) claims that this failure of co-occurrence between negation and assertive focus, negation and imperatives is an African areal feature. For some elaboration on this view see Bearth (1999).

To sum up, the claim I make for Kitharaka is the following.

(97) a. In predicative present tense copula sentences with a third person subject, the focus marker precedes a null copula

b. Focus marker>Null copula>Predicative NP/Adjective

7.2 The problem case. Both the approach that takes the particles \( n \) and \( i \) to be copular verbs or to be focus particles would have to answer one question: why is it that these particles are obligatory in predicative sentences in the 3\textsuperscript{rd} person present tense?

(98) Karimi *(i)-MUBIASARA ‘Karimi is a BUSINESSWOMAN’
Karimi f-businesswoman

David *(n)-OBISA ‘David is AN OFFICER’
David f-officer

For the copular approach the answer is simple: The particles \( n \) and \( i \) are copular verbs, serving a linking role in the copular construction. For the approach that takes the particles to be focus markers, the answer is not straightforward.

I do not have an answer to why the focus markers are obligatory. I can only speculate that there is a parameter that is responsible for the fact that some languages can allow the NP and the predicate to occur next to each without any linking element (Russian (Klaus Abels pc), Egyptian Arabic (Green 1997 and references cited therein)), and those that require obligatory presence of some linking element (Kitharaka, Kikuyu). In the absence of an overt copular verb in Kitharaka, then the presence of the focus marker becomes obligatory. The obligatory attachment of the focus marker has the interesting property that it denotes focus on the predicate, similar to what the preverbal focus marker does (cf.
Thus a copular construction having the pre-predicate focus marker can be followed by another sentence that negates the focus constituent, the predicate.

(99) Karimi I-MUBIASARA
   Karimi f-business woman

   Ari Karimi kinya I-MWARIMU
      no Karimi also f-teacher

   ‘Karimi is A BUSINESSWOMAN’
   ‘No, Karimi is also A TEACHER’

Kiss (1998, 1999) has argued following Donka Farcas (p.c) that in a dialogue pair, only exhaustive focus can be negated. The fact that the constituent following the focus marker in (99) allows this kind of negation possibly means that the predicate phrase contains an exhaustive focus. Furthermore the fact that the sentence with the focus marker in the pre-copula position is felicitous only as an answer to a particular wh-question is itself evidence that there is a focus on the predicate. Thus (100b) is felicitous as an answer to (100a), but (100c) is not.

(100) a. David n-uu
      David f-uu
   ‘Who is David?’ or ‘What kind of work does David do?’

   b. David I-MUBIASARA
      David f-businessman
   ‘David is A BUSINESSMAN’

   c. #I-DAVID mubiasara
      f-David businessman
   ‘It’s DAVID who is a businessman’

(100c) is only felicitous as an answer to (101).

17Kiss (1998, 1999) identifies two types of focus, information focus and identification focus. Information focus merely provides new non-presupposed information while an identification focus identifies the exhaustive subset of a situationally or contextually given set for which the predicate holds.
If question-answer pairs are a good way of identifying focus as has been argued by among others Halliday (1967), then the sentence with the focus marker in the pre–copula position clearly always has the focus on the predicate. We may attribute this focusing effect to the adjacency of the focus marker and the predicate.

To sum up, the particles \( n \) and \( i \) are better analyzed as focus markers because their distribution is sensitive to information structure. The evidence provided from the interaction between these particles and negation also strongly favours an account that takes these particles to be focus markers. Facts from focus projection, multiple questions and the copular paradigm also point to the direction that we might not be dealing with a copula in focus and wh-questions in Kitharaka.

Having gotten some grip on what the particles \( n \) and \( i \) are, we are now in a position to address question (46b):

\[(46) \quad b. \text{Why is it that the particles } n \text{ and } i \text{ occur only with wh/ focus movement but never with wh/ focus in situ?}\]

8. Focus and Wh-Movement.

The idea that wh-phrases are focused has its roots in the semantic claim that in a wh-question, the wh-phrase is the focus while the other parts of the sentence contain information which is presupposed to be known (cf. Takizala 1972, Thwing & Watters 1987, Horvath 1986, 1995, Bresnan & Mchombo 1987, among others). Thus Horvath (1995) argues that wh-phrases are focused because when they ask for information about a particular constituent, they highlight that particular constituent as the one for which the predicate will hold. Horvath (1986) in fact states that it is a universal principle that all non-echo wh-phrases are assigned a focus feature. Kiss (1995) further shows that the focus status of wh-phrases is confirmed by the fact they compete for the same syntactic position with non-wh focus across a number of languages and are marked by similar particles. The view that wh-phrases are inherently focused is also defended by Kwidai. Kwidai (1999: 214) defines focusing as an operation of indexical assertion, “the means by which a speaker attempts to render an entity in the discourse salient for the hearer(s)”. He then goes on to argue that wh-phrases inherently contain a \([+\text{focus}]\) feature because they serve as placeholders for indexical assertion.
Sabel (2000) has integrated the semantic claim that wh-phrases are focused into the syntax by claiming that wh-phrases universally check [+focus] and [+wh] features. Specifically, Sabel argues, that wh-movement is universally triggered by [+wh] and [+focus] features both of which are [+interpretable] and can be specified as [± strong]. In addition, Sabel claims, in the spirit of Minimalism (cf. Chomsky 1995), that since [+focus] and [+wh] features are [+interpretable], they need to be checked only when they are strong. 18

Sabel (2000) uses the idea that wh-movement is triggered by [+wh] and [+focus] features to account for the cross-linguistic positioning of wh-phrases in natural languages. His claim is that languages are parameterized with regard to the strong feature that causes wh-movement. For some languages, the strong feature triggering movement is a strong [+wh] feature; for others it is a strong [+focus] feature. The issue then is how to determine the feature responsible for movement in a particular language. Sabel argues that we can determine the feature responsible for movement because [+wh] and [+focus] features have different properties. His speculation is that [+wh] and [+focus] features differ because while [+wh] features are only found in the position where the wh-phrase takes scope, [+focus] features are found in matrix and embedded Cs. The immediate conclusion for this is that languages that require obligatory movement of the wh-phrase to the sentence initial position (English) have a strong [+wh] feature as the trigger for movement, and those allowing partial wh-movement (Zulu, Malagasy) the strong [+focus] as the trigger.

Sabel further speculates that whenever a [+wh] feature occurs in matrix C, a [+focus] feature co-occurs with it, and in case of long wh-movement, in all embedded Cs. Successive cyclic wh-movement is therefore attributed to the [+focus] features in the embedded Cs, not to [+wh] features. In fact languages such as Bahasa Indonesia and Tuki (also Kitharaka, see section 9) confirm Sabel’s observations because whenever there is long wh-movement, the focus markers occur not

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18 Interpretable features are those features which carry some semantic content, for example wh features and the phi features of nominals. On the other hand, unintepretable features such as structural case do not carry any meaning. The crucial Minimalist assumption is that since uninterpretable features do not enter the interpretive component of the grammar (LF), they must be checked and thereby eliminated before this interface level. The other assumption is that strong features whether uninterpretable or interpretable need to be checked overtly when they are introduced in a derivation, weak features on the other hand may procrastinate and be checked at the level of LF. The checking of strong features therefore involves overt syntactic movement, and this has the effects of displacement.
only in the C of the matrix clause, but also the Cs of the embedded sentences, as in (102) and (103).

(102) [CP Tane owu Puta a-mu-dza [CP ee owu vadzu
Where Foc Puta SP-PL-say that Foc children
va-mu-enda <tane>]]?
SP-PL-go

‘Where did Puta say that the children went?’ (Tuki; Sabel 2003: 236)

(103) [CP Siapa yang Bill harap [CP yang <siapa> akan membeli
Siapa Foc Bill hope Foc will buy
baju untunknya]]?
clothes for him

‘Who does Bill hope will buy clothes for him?’ (Bahasa Indonesia; Sabel 2003: 237)

Sabel (1998) also shows that we can predict fairly accurately the feature responsible for wh-movement because there seems to be a correlation between partial wh-movement and wh-in situ in embedded questions selected by a matrix verb in optional wh-in situ languages. Sabel’s observation is that optional wh-in situ languages cluster into those languages that allow partial wh-movement and wh-in situ in embedded questions selected by matrix verbs (Iraq Arabic, Malagasy, Zulu), and those that allow neither partial wh-movement nor wh-in situ in embedded questions selected by matrix V (Duala, French). Sabel’s conjecture is that for those languages where the trigger for movement is a [+wh] feature, matrix verbs selecting an interrogative CP obligatorily select a strong [+wh] feature, even though the [+wh] feature may be weak in non-selected environments. Wh-in situ in embedded questions is therefore not expected in such languages (e.g. French).¹⁹ For those other languages where the trigger for movement is a [+focus] feature and not a [+wh] feature, the CP selected will have a weak [+wh] feature. The relevant feature responsible for movement will be a [+focus] feature and given that for some languages, this feature can be optionally strong, wh-in situ and ex situ is predicted to be fine in embedded questions. Absence of wh-in situ

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¹⁹See however Boškovič (2001) for an explanation based on possibilities of LF insertion of phonologically null or phonologically realized complementiser.
in questions selected by matrix V is therefore seen as a signal that the feature responsible for wh-movement is a \([+\text{wh}]\) feature (English, French).

The feature typology of Sabel predicts the types of languages given in Table 2.

<table>
<thead>
<tr>
<th>Feature [+Focus]</th>
<th>Strong</th>
<th>Weak</th>
<th>Strong/weak</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strong</td>
<td>G1</td>
<td>German</td>
<td>G2</td>
</tr>
<tr>
<td>Weak</td>
<td>English</td>
<td>Chinese</td>
<td>Duala/French</td>
</tr>
<tr>
<td>Strong/weak</td>
<td>G3</td>
<td>Kikuyu/</td>
<td>Kitharaka</td>
</tr>
</tbody>
</table>

Languages with strong \([+\text{wh}]\) features (English) will only allow full wh-movement, as in (104a). Those with only weak features will allow only wh-in situ, (104b). Languages where the [wh] feature can be optionally weak (Duala, French) will allow wh in situ as well full wh-movement but never partial wh-movement and wh-in situ in embedded questions selected by matrix V, (104c). Languages where the [focus] feature is always strong (German) will allow partial in addition to full wh-movement, but will never allow wh-in situ; see (105a). In a language where the focus feature is always weak, the wh-phrase will always remain in situ, as in (105a). A language where the [+focus] feature can be weak or strong (Kikuyu) has more options: partial wh-movement, full wh-movement and wh-in situ in embedded questions, as in (105c).

(104) a. \[
\text{CP} \quad \sqrt{\text{C'}} \quad \text{C} \quad \text{TP} \\
\quad [+\text{strong wh}] \quad \ast \quad \ast \quad \ast \text{Wh-in situ} \\
\]  

(105) a. \[
\text{CP} \quad \ast \text{C} \quad \text{TP} \\
\quad [\text{-strong wh}] \quad \sqrt{\ast \text{Wh-in situ}} \\
\]  

\(20\) (G1, G2, G3, G4) refer to gaps in the table.
Sabel's feature system is good because it can generate almost all the patterns observed crosslinguistically. However it is weak in another respect. It generates languages which are not attested, or which one would not even know how to identify (G1, G2, G3, G4).\(^{21}\) I show in the next section how Kitharaka fits into the overall picture.

\(^{21}\)As far as I can see, the unattested patterns can be excluded by stipulating that [+wh] and [+focus] features should not be bundled in a way such that the effects of one feature, for example, [+focus] obscures the effects of the other, [+wh]. In fact Boškovič (1999) has shown that [+focus] and [+wh] features make a different contribution.

Recall that in partial wh-movement, as in (13), the wh-phrase occurs in a non-initial position—in fact, after the C of an embedded sentence. Furthermore, recall that Kitharaka allows wh-in situ in embedded questions selected by interrogative selecting verbs, as in (106).

\[(106)\] N-ti-ji a-ka-gur-a mbi

\[1^{st}\] sg-neg-know sm-fut-buy-fv what

N-ti-ji i-mbi a-ka-gur-a <mbi>

\[1^{st}\] sg-neg-know what sm-fut-buy-fv

‘I do not know what s/he will buy’

Thus, the immediate conclusion for Kitharaka is that the trigger for wh-movement is a strong [+focus] feature, not a strong [+wh] feature. If the [+wh] feature was strong, the wh-phrase would always be forced to move to the sentence initial position. The [+wh] feature is therefore always weak in Kitharaka.

The fact the wh-phrase occupies a position after the complementiser also raises the question of which position the wh-phrase moves to. Muriungi (2003) has shown that the field between the complementiser and the subject can host topics in addition to focused phrases. Furthermore, Muriungi has shown that there is a strict ordering of the elements after C in that the topic must precede the focus, (107).\(^{22}\)

\[(107)\] a. John a-ug-ir-e ati ibuku riri n-uu a-(ri)-gur-ir-e

John sm-say-perf-fv that book this f-who sm-(om)-buy-perf-fv

‘Who did John say that this book, he bought it?’

b. *John a-ug-ir-e ati n-uu ibuku riri a-(ri)-gur-ir-e

John sm-say-perf-fv that f-who book this sm-(om)-buy-perf-fv

‘Who did John say that this book, he bought it?’

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\(^{22}\)Kitharaka focus and topics differ in that while a fronted focus bears a focus marker, a fronted topic appears in its bare form. Focus also seems to form a single uninterrupted phonological domain with the following sentence, while the topic is characteristically severed from the following sentence by a pause.
Building on work by Rizzi (1997), Muriungi (2003, 2004) argues that the Kitharaka Complementiser system needs to be split into the heads Force₀, Top₀, and Foc₀. The complementiser occupies Force₀, the topic Spec TopP, and the focus Spec FocP.²³ Thus the sentence in (107a) is given the representation in (108).

²³ In this respect Kitharaka resembles other languages requiring a split C-system for example Italian (Rizzi 1997), Hungarian (Puskas 1997) Gungbe (Aboh 2004), Kikuyu (Schwarz 2004), Hausa (Green 1997) among others.
For Kitharaka, therefore, Foc and not C is the locus of the strong [+focus] features. Merging Foc with TP introduces a strong feature into the derivation causing the wh-phrase to move to its Spec to check this strong focus feature. Having been checked, the focus marker, morphologically a proclitic moves and attaches to the left of the element in Spec FocP (Muriungi 2003) (see also Green 1997, Schwarz 2003, 2004 for a similar conclusion for Kikuyu). This kind of conclusion is forced anyway if we assume that in all languages, specifiers precede heads in the underlying structure (Kayne 1994). On the other hand, the topic moves to Spec TopP to check a strong [+topic] feature in Top. One could argue along the lines of Rochemont (1998), that the strong topic feature is realized by the pause that follows the topic.

The same structure as the one in (108) will hold for full wh-movement except that then, there will be no Force and Topic projections, as they will not be part of the numeration (the syntactic elements from which the derivation will be constructed).

The analysis of the intermediate strategy will also be the same except that for this case, the highest functional projection will be TopP. The subject will then move to Spec TopP and the focus Spec FocP. The focus does not therefore move to the position after the subject in the intermediate strategy (Muriungi 2003). The structure for (109) is as shown in (110).

(109) John n-uu a-ring-ir-e <uu> ‘Who did John beat?’
    John f-who sm-bear-perf-fv

Wh-phrases in Kitharaka therefore always move to a uniform landing site, Spec FocP, whether in full wh-movement, intermediate strategy or partial wh-movement (Muriungi 2003).
One would naturally expect the framework adopted here to explain the obligatoriness of the movement of subject, manner and reason wh-phrases. The immediate answer that comes to mind is that these types of wh-phrases always contain a strong [+focus] feature. In fact an approach in terms of feature strength is suggested by Sam Epstein (p.c) to Boškovič (1999) to explain the ungrammaticality of a sentence such as *I wonder who left how/why. This approach is, however, undesirable, as it is not clear why a subject wh-phrase would have to have a strong [+wh] (focus feature in our case), while a wh-object, which is a DP just like the wh-subject would not. I will therefore adopt the proposal I hinted at earlier: that the subject position in Kitharaka has topic properties and is therefore incompatible with a focus (see footnote 6); that manner and reason wh-adjuncts must always move because they lack a position for a variable (Reinhart 1993, Chomsky 1995).

Another telling piece of evidence that wh-movement in Kitharaka is focus movement comes from the observation that a moved wh-phrase and a moved focused XP cannot co-occur in the same clause.
(111) *I-Karimi i-mbi a-gur-ir-e <mbi>
    f-karimi f-what sm-buy-perf-fv
    ‘What did Karimi buy?’

(112) *I-mbi i-Karimi <karimi> a-gur-ir-e <mbi>
    f-what f-Karimi sm-buy-perf-fv
    ‘What did Karimi buy?’

The sentences in which the subject focus precedes the object wh-phrase and in which the order of these two phrases are reversed are ungrammatical. We cannot therefore blame the ungrammaticality to superiority effects. In the framework I am following here, it could be argued that there is just one focus position and maximally only one focused phrase can move there (cf. section 5 on multiple questions). Alternatively, it could be conjectured that once the strong [+focus] feature in Foc has been checked by one of the focused phrases, movement of a second focused phrase is not possible as there is no trigger.

Let me address the issue of cyclic movement and the occurrence of the focus marker on V. The claim I will make here is that the focus markers that appear as though they are superficially attached to the verb are in a much higher position, in Foc. In these types of constructions, therefore, the subject is always a topic (see also footnote 5). Building on work by Baker (2003) where any verbal morphology related to some XP indicates that such an XP is in a dislocated position, it can be conjectured that since subjects in Bantu comes with an obligatory subject agreement marker, they are always in a dislocated A-bar position. In fact, this observation is strongly suggested by the fact that the subject always comes before the preverbal focus head in Kitharaka. In short, the cyclic focus markers are always in Foc, and the wh-phrase moves successive cyclically through the Spec position of Foc, checking all the strong features in the embedded Foc's. The only reason why the wh-phrase does not occur in its bare form in the matrix Foc is that after the checking of the strong focus feature in the matrix Foc, the focus marker moves and attaches to the wh-phrase in its specifier. Focus markers will not ap-

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24One would expect adverb placement facts from Kitharaka to convey whether indeed the F-marker is in a position higher than the subject. Such evidence, however, is unfortunately not available for Kitharaka due to its agglutinative nature. The fact is that Kitharaka adverbs tend to cluster in the post verbal and the pre-focus marker position.

The relative ordering of clausal adverbs is: Usually-already-(always)-(Focus marker)-VERB-well-completely-(always)-anymore. One can easily see that adverb placement facts will not help to directly locate the position of the focus marker.
pear when the wh-phrase is left in situ because there will be strong [+focus] feature in Foc with no checker in their domain (Spec FocP).
The cases with predicate focus and preverbal focus will also follow naturally from this account. All that needs to be maintained is that the subject is always in a topic position above FocP, and that the focus marker possibly cliticizes to a null operator in Spec FocP.

10. Verbal Morphology and Question-Formation.

Let us consider next the array of changes that occur on the verb when there is question formation. We start with question (46c):

(46) c. Why is the marking of present tense sensitive to the presence, ku versus lack, ri of wh-related movement?

The data of (113) and (114) remind us of the facts motivating this question, wh-movement co-occurring with the ku present tense marker and wh-in situ with ri.

(113) I-mbi u-ku-thugania ati John n-a-ku-ring-a <mbi>
    f-what 2nd sg-pres-think that John f-sm-pres-beat-fv
    ‘What do you think that John is beating?’

*I-mbi u-ri-thugania ati John n-a-ri-ring-a <mbi>
    f-what 2nd sg-pres-think that John f-sm-pres-beat-fv
    ‘What do you think that John is beating?’

(114) U-ri-thugania ati John a-ri-ring-a uu
    2nd sg-pres-think that John sm-beat-fv who
    ‘Who do you think that John is beating?’

*U-ku-thugania ati John a-ku-ring-a uu
    2nd sg-pres-think that John sm-pres-beat-fv who
    ‘Who do you think that John is beating?’

I also observed that the ku form occurs when there is focalization, topicalization and relativization. The simple observation here is that ku conveys that a wh-operator has moved through the clause in which it appears. Ri on the other hand shows that no such movement has occurred. I take it therefore that ku marks some
agreement with an A-bar moved wh-operator, while \( ri \) marks agreement with an operator that is in situ at PF.

There is an interesting pattern that follows from my analysis of the tense marker \( ku \) and \( ri \) as related to presence versus absence of wh-related movement. We saw earlier that the presence of negation on the verb forces overt movement of the wh-phrase. Since there is movement, we predict that negation (whatever allomorph) should co-occur with \( ku \) but not \( ri \). This is generally the case.

\[(115) \]  
\*N-uu Maria a-\( ti \)-ri-ring-a  
\( f \)-who Maria sm-neg-pres-beat-fv  
‘Who isn’t Maria beating?’

\( N \)-uu Maria a-\( ta \)-ri-ring-a  
\( f \)-who Maria sm-neg-pres-beat-fv  
‘Who can Maria never beat?’

\[(116) a. \]  
N-uu Maria a-\( ta \)-ku-ring-a  
\( f \)-who Maria sm-neg-pres-beat-fv  
‘Who isn’t Maria beating?’

\[ b. \]  
\*N-uu Maria a-\( ti \)-ku-ring-a  
\( f \)-who Maria sm-neg-pres-beat-fv  
‘Who isn’t Maria beating?’

The neat prediction is destroyed by the fact that \( ta \) combines with \( ri \) to form a complex that means ‘never’. We observed a related fact with the future \( ka \), which never combines with the focus marker, but when it does combine with it, this gives rise to a ‘must’ reading. I return to these facts shortly.

\[(116a) \] is striking in another respect: it has the \( ta \) allomorph of negation, and this \( ta \) occurs with \( ku \), the morpheme we have associated with wh-extraction. Recall from section 3 that \( ta \) occurs only in present tense \( ku \)-marked verbs that are clausemates of the wh-phrase. The data is repeated here for convenience.
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(117) **I-mbi** u-ta-ku-thugania ati Munene n-a-ku-ringa <mbi>
   f-what 2\textsuperscript{nd} sg-neg-pres-think that Munene f-sm-pres-pres-beat-fv
   ‘What don’t you think Munene is beating?’

* **I-mbi** u-ti-ku-thugania ati Munene n-a-ku-ringa <mbi>
   f-what 2\textsuperscript{nd} sg-neg-pres-think that Munene f-sm-pres-pres-beat-fv
   ‘What don’t you think Munene is beating?’ (Ti occurs as a clausemate to matrix wh)

u-ri-thugania ati i-mbi Munene a-ta-ku-ringa <mbi>
   2\textsuperscript{nd} sg-pres-think that f-what Munene sm-neg-pres-pres-beat-fv
   ‘What don’t you think Munene is beating?’

*u-ri-thugania ati i-mbi Munene a-ti-ku-ringa <mbi>
   2\textsuperscript{nd} sg-pres-think that f-what Munene sm-neg-pres-pres-beat-fv
   ‘What you think Munene isn’t beating?’ (Ti occurs as clausemate to embedded wh)

The Kitharaka negative morpheme *ta* behaves like the Duala focus particle *no* which occurs only on the verb of the clause in which the wh-phrase ends, but not on the verbs of the embedded clauses. I think this distribution of *ta* also points to the fact the *ta* is wh-movement related, similar to the *ta* of Kikuyu. Speculatively, *ta* possibly marks some strict, local A-bar agreement between the verb and the wh-phrase/focus. I leave the exact details of this local relation for future investigation.

Some other generalization needs to be drawn for the *ta* occurring in the remote past and *without* clauses. This generalization appears elusive at the moment. As Harford (1997, footnote 10) has observed, the forms of negation in Kitharaka do not portray a very systematic distribution.

Let us recap this section by speculating on possible approaches to the remaining four questions.

(46)  d. Why do ku-marked verbs, clausemate to a moved wh-phrase, require the negative morpheme *ta* and not *ti*?
   e. Why does negation force wh-movement?
   f. Why is it that the present perfect and the future cannot freely co-occur with the focus marker?
   g. Why does the future disappear in the presence of negation?
For (46d), I have claimed that although negation is a pretty chaotic syntactic category in Kitharaka, there is some evidence that *ta* possibly marks some kind of local A-bar agreement relation between the verb and the wh-phrase/focus, a relation yet to be fully articulated.

Obligatory wh-movement in the presence of sentential negation (46e) might possibly be tied to the fact that *in situ* wh-phrases might be required to move at LF, to create appropriate logical structures for interpretation. Since negation is one of the things that blocks LF wh-movement (cf. Beck 1996), then wh-phrases would always be forced to move in the overt syntax as movement at LF would be impossible. Otherwise put, an intervening NegP A' Specifier at LF would act as a barrier preventing antecedent government of the trace of the LF moved wh-phrase (cf. Rizzi 1990).

The co-occurrence restrictions/patterns between the present perfect and future with the focus marker on the one hand and the future and negation on the other, (46f-g) does not, I think, follow from any restriction that verbs in the future or present perfect cannot be focused with the focus marker *nli* or negation *ti* or *ta*. The restrictions follow from the way the system as a whole is organized. The simple data facts we have observed for Kitharaka are follows:

(118) a. The focus marker and *ku* tense marker conveys present progressive (Section 1)
   b. *Ku* tense marker minus the focus marker conveys present perfect (Section 1)
   c. The future *ka* and the focus marker means 'must' (Section 1)
   d. The future *ka* and negation conveys some 'don’t' meaning especially in imperatives (Section 3)

It follows quite transparently that a future meaning cannot be conveyed by a sequence of the future with negation or the focus; these forms are used to communicate the lexicalized meanings of 'don’t' and 'must' respectively. Similarly, the focus marker cannot be used in the present perfect as there would be no way to distinguish the present perfect and the present progressive. The conclusion that needs to be drawn here is that although morpheme combinations and orders are determined by syntactic compositionality (see Baker 1985), or templaticity (Hyman 2003), there are times when expected morpheme combinations cannot occur because of the need to reduce ambiguities in the system.
The issues related to verbal morphology and question formation such as the changes in tense forms, obligatory movement with negation and the co-occurrence restrictions between negation, and focus and tense require more detailed and careful investigation. I will explore these issues in subsequent papers.

11. Summary.

I have argued in this paper that wh-movement in Kitharaka is triggered by a strong focus feature. The strong focus feature is morphologically realized by the focus marker i and n. Wh-in situ occurs when there is no focus marker, hence no strong focus feature to trigger movement. I have also shown that wh-questions in Kitharaka triggers some form of wh-agreement on the verb, and this is manifested in two forms: present tense changes (ku with wh-movement, ri with wh-in situ), and the negative morpheme ta which occurs with ku-marked present tense verbs that are clausemates of a moved wh-phrase/foci.

REFERENCES


Wh-Questions in Kitharaka


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Acquisition of verbal inflectional morphosyntax in Swahili is the topic of this volume. Chapter 1 “Setting the Scene” [1-29] explains nativist and non-nativist accounts of acquisition, and sets the goals of the book, which are to provide a theoretically informed account of the acquisition of Nairobi Swahili and to compare the acquisition of Swahili with acquisition of other languages. The emphasis of this study is the system of tense-aspect-mood inflectional marking and subject markers on the verb, which are the richest areas of morphology in Swahili. Chapter 2 “The Swahili Language: Description and Theoretical Analysis” [31-97] describes the nature of the target language, adult Nairobi Swahili, and is divided into two parts. Part 1 describes the relevant aspects of the language, covering sociolinguistic facts, phonology and especially an in-depth account of verbal inflection. The most salient feature of this dialect of Swahili is the noun class system (which governs subject agreement and object pronouns). In this dialect, agreement reduces to human vs. non-human patterns, and occasionally, verbal subject agreements are omitted. Part 2 of the chapter focuses on a theoretical description of the language. This presentation begins with a P&P-theoretic derivation of simple tensed clauses, then proceeds to explain null subjects, with ample comparison to null subject facts of Indo-European languages, showing via a corpus analysis that null subjects predominate in Nairobi Swahili, 82% to 18%. This is followed by documentation and analysis of clauses lacking subject agreement.

Chapter 3 “Theories of Language Acquisition” [99-138] presents a number of influential theories of language acquisition, divided into “theories of omission”, and theories of null subjects. These include the theories of metrical omission (omission of material is phonologically constrained by metrical structure); truncation theory where child and adult grammar differ in the specification of what constitutes the root node of a clause; underspecification of tense; underspecification of Agr; and a model with underspecification of both tense and Agr. The final chapter, “Results and Evaluating Theories” [139-200] ties the preceding discussion together by bringing in the data from acquisition of Swahili by four children. It is shown that children very rarely omit mood, but frequently omit both subject agreement and tense, supporting the independent Agr and T omission model. This is followed by appendices “Methodology and Related Issues” [201-206], “Statistical Properties of Adult Swahili” [207-208], “The Staging Process” [209-218] and “Individual Child Data” [219-220], plus references [221-234] and indices of subjects and names.

The phonology of the West Mande language Jòwulu (Samoghokan) spoken in Mali and Burkina Faso is the topic of this volume, whose purpose is assisting the Jò populace in a choice of orthography for their Jòwùlú language. In the introduction [7-12], we learn of the demography of the Jò people, as well as learning about previous research on the language and its position within Mande. Chapter 2 “Les phonèmes” [13-86] gives the bulk of the analysis, laying out the system of consonant and vowel contrasts. Much of this chapter is devoted to establishing phonemic contrast between the various consonants via minimal and near-minimal pairs. Analytically somewhere between vowel and consonant is the “floating nasal”, which may appear contextually as a nasal consonant, a high vocoid, or may have an effect on the following consonant. The 34 consonant phonemes include various labialized and palatalized series. A surprising contrast is posited between the plain velar /w/ and the labialized velar written /ww/ — but this is realized pronetically as [w] versus [wv], just as /gw/ is realized as [gv] and /bw/ is realized as [bv]. The language also has vowel nasalization and length contrasts combining with a basic 7-vowel system /i e æ a o u/.

The third chapter “Unités phonologiques supérieures” [87-97] lays out the structure of syllables and phonological words, and gives a number of dependency tables which set forth restrictions on, e.g., CV and CVV, or tables documenting the various syllable types in the first syllable combined with possible second and third syllable types. Syllables are underlyingly always open (although on the surface, coda consonants exist because of vowel deletion), onsets are of the type (N)C, and the only onsetless syllables have a short vowel and no floating nasal. Words may contain up to 5 syllables. Chapter 4 “Processus (morpho-)phonologiques” [99-113] presents phonological processes such as vowel elision where CVRV → CRV (R = liquid or nasal), VRV{C,#} → VR{C,#}, total vowel harmony across liquids and nasals, consonantal changes induced by the floating nasal, and effects on /r/ where /r/ becomes [n] after nasal vowels and [l] after /l/. “Harmonie vocalique” [115-119] further considers restrictions on vowel sequences. The final chapter “Tonologie” [121-133] gives tone contrasts, which include 3 or 4 tone levels as well as certain tone contours. This is followed by a two page bibliography, and a 300 word list in French, Bambara, Jòwulu orthography and Jòwulu phonetics.


This textbook is a reworking of the author’s 1987 textbook by the same title, which especially takes into account changes in the Somali orthography. After the introduction [13-16] which contextualizes the Somali language and points to certain structural properties (accent, gender
and number, free word order), the book contains 20 chapters covering the various aspects of Somali. Following the first lesson on pronunciation [17-27], the remaining 19 lessons have a fixed structure: a text or conversation, a Somali-German vocabulary list, grammatical notes, and exercises of various types. After these lessons, the book provides paradigms of pronouns, demonstratives, and verbs in the various tenses, aspects and moods including negation [243-254], a Somali-German glossary [255-302], a German-Somali glossary [303-347] and a one-page grammatical index. Because the book is based on Standard Somali, ATR vowel distinctions are not marked, but accent is indicated in the vocabulary sections, though not in the texts.


The structure of the Bantu language Kwanyama (R 21) spoken in Angola and Namibia is described in this grammar. The reader should not be misled by the title: this is not just a description of the tonal system of Kwanyama, but rather is a fully tone-marked description of the language. "Introduction" [1-11] sets forth the goals of the work, explains the fieldwork situation, indicates what was previously known about tone in this and other Wambo languages, as well as discussing orthography and tone-marking conventions. Chapter 2 "Segmental Phonology" [12-21] lists the segmental phonemes, notes distributional peculiarities as well as explaining the three nasal-related phonological processes, and discusses vowel merger rules and vowel harmony. Chapter 2 "Tone" [22-28] discusses how phonological tonal forms are realized phonetically, explaining especially low-level declination and upsweep processes which might lead the fieldworker and analyst astray. This chapter also introduces two characteristic facts of Kwanyama tone, that H tones shift one mora to the right, and that H tone spreads to the right. In Chapter 3 "Nouns" [29-65], the system of noun classes is given, beginning with prefixation on nouns and proceeding to the agreement system, then nominal derivation. The final two sections of this chapter set out the very complex system of grammatical tone in nouns, where a noun's tonal realization varies as a function of phonological environment and grammatical function.

Chapter 4 "Verbs" [66-123] describes verbal derivational and inflectional morphology. The various subsections on specific TAM categories explain the patterns of tone assignment found in that category. "Minor Word Categories" [124-136] describes adjective inflection and derivation, the forms of pronouns, numerals, interogatives, conjunctions and ideophones. Chapter 7 "On Tone in Other Zone R Languages" [137-141] discusses tone in closely related Bantu languages, especially comparing the pitch realization of tone in Kwanyama and Mbandja. The conclusions [142-149] summarize the tone rules of Kwanyama, which is followed by bibliography [150-156], nominal tone paradigms [158-166] which document the nine contextually-determined tonal variants of nouns of each tone type, and verbal paradigms [169-217] which give examples of H and L verbs in different inflected forms. The book ends with texts [218-227] and a Kwanyama-English vocabulary [228-299].

This grammar presents the structure of one of the twelve Songhay languages, Tondi Songway Kiini spoken in the village of Kikara, south-central Mali. “Introduction” [1-8] provides background information on the language, explains the format of the grammar, and states transcriptional conventions. Chapter 2 “Sketch of the Grammar [9-12] highlights the main features of the language, and how this language diverges from other Songhay languages. Chapter 3 “Phonology” [13-85] begins with a consonant inventory, proceeds to oral vowels, diphthongs and nasal vowels, then describes syllable structure. The chapter also describes phonological processes of nasal place assimilation, vocalic contraction and shortening, then extensively describes the tone inventory and sequences, which includes H, L, Rise, Fall and the uncommon rise-fall and fall-rise tones. Tonal processes include rightward spread, anticipatory H-lowering, and definiteness-related tone lowering.

Chapter 4 “Nouns, Pronouns, demonstratives, and Adjectives” [87-120] gives the pronouns which distinguish three persons plus logophoric/reflexive and singular/plural, free-standing demonstratives and demonstrative suffixes, nominalization, verb/adjective relations, numerals, and various types of compounds. In Chapter 5 “Noun Phrases” [121-143], the structure of NP is given: a possessor may precede the noun, and other modifiers follow (adjectives precede numerals), with any demonstrative suffixes at the very end. This chapter also describes higher-level nominal phrases including instrumentals, comitatives, conjunctions, comparatives and locatives. The 6th chapter “Verbal Voice and Verb Derivations” [145-154] covers derivations such as the causative, potential passive and compounding. “VP structure” is described in Chapter 7 [155-176], starting with the copula and progressing to the morphosyntax of mood, aspect and negation. Chapter 8 “Focalization, Relativization, Discourse Functions” [177-206] describes the productive syntactic processes for focusing an NP, involving a marker [á] before the focalized constituent. Except for ‘why’, which can combine with another focus, only one focused NP or adverb is allowed per clause. Since wh-modifiers put focus on NPs, this chapter also discusses various wh-words; in addition, relative clauses are presented.

Chapter 9 “Syntax” [207-243] lays out the basic structure of the sentence, including the syntax of multiple non-subjects (the language has S-O-V-Other word order), adjective intensifiers, scope of negation, conditional and complement clauses, temporal clauses, subjunctive complements, infinitives and serial verbs. Chapter 10 “Anaphora” [245-252] discusses pronouns in indirect speech, reflexives and reciprocals, the final chapter [253-265] presents texts, and a dictionary [267-440] in TSK-English-French finishes the book.
In this volume, the Southern Lwoo branch of Western Nilotic is described synchronically and diachronically. Chapter 1, the introduction [1-11] gives background on the languages being investigated — Acholi, Adhola, Alur, Kumam, Lango and Luo — and describes previous research on reconstruction and classification of Southern Lwoo. The second chapter on phonology [13-156] begins with an analysis of palatal and bilabial vocoids, addressing the issue of glide versus vowel interpretations of the high element of diphthongs. Historical changes in the reconstructed 10-vowel system into daughter languages are given, the synchronic vowel phoneme inventory of each language is argued for, and the status of vowel length is investigated. The chapter also addresses the issue of palatal stops versus postalveolar affricates, the reconstruction of labiovelars, implosives, dentals, NC sequences and fricatives. The phonological process of vowel and consonant harmony are also considered, along with consonant polarity. Chapter 3, on tone [157-215], discusses the notion of accent in these languages, gives the tone inventory and describes tonal alternations for each language, and proposes reconstructed rules of tone spreading and tone/accent interaction. In the 4th chapter, morphology is described [217-283]. This includes the different subject and object pronouns, numbers and certain abstractions such as participles. The chapter on lexicon [285-353] compares and reconstructs 103 lexical items. The final chapter on internal typology and classification [355-361] uses 20 grammatical features to develop a Southern-Lwoo internal typology, as well as an internal classification of these languages. The volume ends with an extensive bibliography [363-383].


This grammar deals with the East Gurage (Semitic) language Zay, spoken in and around Lake Zway, 60 miles south of Addis Ababa. In Chapter 1 “Einleitung” [15-26], the author tells us about where Zay is spoken, how it relates to other Ethiopian Semitic languages, and presents the methodological base and organization of the grammar. Chapter 2 “Phonologie” [27-76] presents the phoneme inventory, which includes a voiced, voiceless and ejective stop series as well as the marginal phoneme implosive [d]. The chapter then presents syllable structure and phonological processes such as t-assimilation and lenition of preconsonantal /t/ to [x]. The third chapter “Grammatische Kategorien und Deren Funktion” [77-307] constitutes over half of the book, and has sections on pronouns and agreement, verbs, nouns, adverbs, quantifiers, ideophones, clitic prefixes, conjunctions, and focus markers. Pronouns include free pronouns which may take a focus marker or be in the accusative, as well as possessive suffixes on nouns. Verbs
also have a rich set of subject and object agreement pronouns.

Verb inflection is quite complex, involving five morphophonemic stem types. The realization of verb inflection in each of these types depends in part on the number of root consonants, and includes affirmative and negative moods in various persons, numbers and genders, aspect distinctions, and differences in form depending on whether an object pronoun is included. Verbal derivation also exists whereby causatives, mediopassives and factitives can be created. The description of nouns explains the marking of gender, number (plural and singular), case (nominative, accusative and vocative), the definite noun suffix, and derivation. There are also a number of focus particles which can appear on various words in the sentence. In Chapter 4 “Syntax und Diskurs” [309-381], the structure of the NP and S are described. Modifiers precede the head in the NP, and sentences are SOV or OSV. Chapter 5 “Zusammenfassung” [383] summarizes the book, and the final chapter “Sprachbiespiele” [385-406] gives texts in Zay as well as an Amharic version of the texts. The book ends with bibliography [407-416] and an index [417-422].
UPCOMING MEETINGS
ON AFRICAN LANGUAGES / LINGUISTICS

2006

March 17-19

April 6-9

April 20-22

April 27-29
TYPOLOGY OF AFRICAN LANGUAGES. University of Colorado, Boulder. Abstract deadline Jan. 31, 2006 by email to Zygmunt.Frajzyngier@colorado.edu or Erin.Shay@colorado.edu, or paper abstracts arriving by Jan. 31, 2005 to Prof. Zygmunt Frajzyngier, Dept. of Linguistics, Box 295, University of Colorado, Boulder, CO, USA 80309.

May 26-27

July 5-7
ANNUAL LINGUISTICS CONFERENCE SOUTH AFRICA. Durban, South Africa. Abstract deadline:

July 10-12
WORLD CONGRESS ON AFRICAN LINGUISTICS, 5TH. Addis Ababa University, Addis Ababa, Ethiopia. Abstract acceptance dates: July 10-Dec 10, 2005. 1 page 12 pt. abstract as PDF or postscript attachment emailed to afriling@dling.aau.edu.et) or Word document on 3.5 in. floppy mailed to WOCAL 5, Department of Linguistics, Addis Ababa University, P.O.Box 1176, Addis Ababa, Ethiopia. Further information at the conference website http://www.aau.edu.et/faculties/linguistics/wocal.htm.

July 30-August 6
25TH CONGRESS OF THE WEST AFRICAN LINGUISTICS SOCIETY. University of Benin, Cotonou. Abstracts deadline: April 30, 2006. Abstracts should be submitted to Prof. Hounkpati B. C. Capo, Laboratoire International Gbe, BP 13 Kômo Mono Bénin, Email labogbe2003@yahoo.fr, tel: +229 95451355; or to Prof. Flavien Gbeto, Université d'Abomey Calavi, BP 526 Cotonou Bénin. For further information, please contact the secretary-treasury of WALS: Prof. Firmin Ahoua, Secretary-Treasury, 08 BP 2116 Abidjan 08, Côte d'Ivoire: email fahoua203@yahoo.fr., Tel:+225 07026253

Note on Supplement

This volume includes a supplement, West African Linguistics: Papers in Honor of Russell G. Schuh guest-edited by Paul Newman and Larry Hyman, 250 pp. The volume will be available for $10 to all subscribers of volume 34. The non-subscriber price will be $20 plus shipping.