

VERB RAISING AND WH-MOVEMENT IN BUKUSU

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Abstract. This paper firstly discusses verb raising and secondly the concept of Wh-movement in Bukusu, i.e. by examining the principle of successive cyclic Wh-movement and the mechanisms that underlie the extraction of the Noun Phrase (NP) through questioning, the Complementizer Trace Phenomena (that-t effect), and the Principle of Subjacency in embedded clauses. Verb raising can only occur in embedded clauses under the condition that the position is not lexically blocked, whereas subject extraction from the embedded clause is possible only if movement applies cyclically and when the extracted Wh-phrase functions as a complement to the verb within the embedded clause. Resulting structures of the extraction of the Wh-phrase from the Complementizer Phrase (CP) which is to the immediate right of a C *that*, are well-formed, indicating that the that-t effect does not hold in Bukusu. As predicted by the Subjacency Constraint, which restricts Wh-Phrase movement to a certain range, examples from Bukusu reveal that the constraint does not hold because movement takes place across barriers resulting in well-formed structures. Long-distance movement of the Wh-phrase in Bukusu is as a result of cyclic short movements.

Keywords: Verb Raising, Wh-Questions, Movement, Subjacency, Syntax

Languages: Bukusu

1. INTRODUCTION

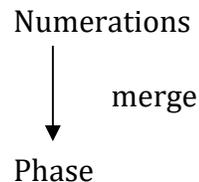
This paper aims to contribute to the understanding of successive cyclic Wh-movement and, more specifically, to the mechanisms that underlie the extraction from CP complements. We first introduce the background of Wh-movement in Bukusu by focusing on the analysis of the Inflectional Phrase (IP)¹ in structure derivation, which involves verb movement due to feature checking, morphological properties, and strong agreement features in both the matrix and embedded clauses. Verb raising is discussed, showing the trigger for the movement to the different positions to which the verb raises in both the matrix and embedded clauses, as preparation for the analysis of movement due to extraction that involves other categories such as the noun.

The discussion of the noun category focuses on movement and/or extraction of the noun phrase to form what we call Wh-questions, i.e. Wh-movement. The analysis relies on the principles mentioned below, to verify how applicable their prediction fit in Bukusu as a language. This includes a discussion on the conditions under which long movement in the embedded clause is possible using the principle of Phase Impenetrability Condition (PIC) as a theoretical guide, which requires that only the edge of a phase (its head and any specifiers) be accessible to operations outside the phase. Chomsky (1998) defines a PIC as the following:

¹ Note that IP = TP in this paper.

“In a phase α with head H, the complement of H is not accessible to operations outside α , but only H and its specifier(s).”

Phases are syntactic objects constructed from a single numeration, i.e. a list of lexical items which are to be used in the derivation and which may also contain phases formed from previous numerations. Chomsky (1988) further mentions that each numeration contains only enough material to construct a single ‘phase’ category. When the phase is completed, a new numeration may be selected to construct a larger phase which contains the first one. This is represented as the following:



CPs are always phases; TPs are not. Other phase categories are not yet established. Chomsky (1998) suggests that a VP is also a phase. PIC holds that phases are typically convergent and relatively stable linguistic objects in which no more checking is necessary. That they are used as input to the phase construction just like lexical items are and that the internal content of a phase is not accessible from outside, though exceptions may apply.

Questioning in Bukusu can be either *in-situ* or through Wh-movement. This analysis points out the phrases that allow Wh-movement and those that do not. Principles examined include the Complementizer Trace Phenomena (CTP), otherwise referred to as *That-t effect* in Pesetsky (1982:297), and the effect it has on Wh-movement and Subjacency as discussed in Richards (1998: 601) under the Principle of Minimal Compliance, which states that:

For any dependency D that obeys constraint C, any elements that are relevant for determining whether D obeys C can be ignored for the rest of the derivation for purposes of determining whether any other dependency D' obeys C (Richards 1998: 601).

That-t effect refers to a situation that prohibits Wh-movement and other extractions from the subject position in embedded clauses headed by a complementizer (Pesetsky 1982:297). This means that subjects cannot undergo Wh-movement when they are to the immediate right of *that*, *if*, or a *Wh-phrase*. The other principle examined is Subjacency, which Richards (1998:605) defines as the following:

A [+wh] complementizer cannot be associated with a wh-phrase via movement in a way that crosses barriers of a certain kind (wh-islands, complex noun phrases, etc.)

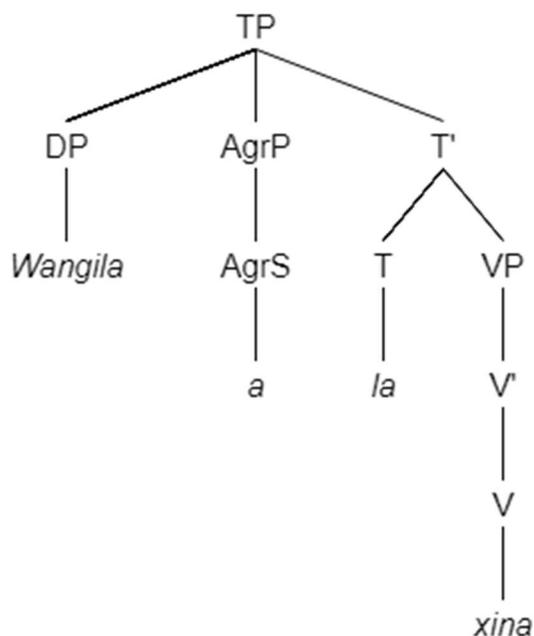
How does verb movement in Bukusu take place, and what factors trigger verb movement in this language? In an effort to answer this question, we first carry out an analysis of verb and subject raising as covered by Wh-movement in both the matrix and embedded clauses, since they involve movement from a lower to a higher position in the structure. This analysis serves as an introduction of movement within Bukusu, which further develops into an analysis involving movement of other categories (such as nouns) to form Wh-questions.

Bukusu is a Bantu language spoken in Western Kenya. It is an agglutinating language. Like other Bantu languages, Bukusu has a basic SVO word order.

1. Wangila ka-pile omwana
Wangila AGR.PAST-beat child
Wangila beat the child.
2. Wangila a-la-pa omwana
Wangila AGR-FUT-beat child
Wangila will beat the child.

Through elementary operations like *merge*, where constituents are combined together in a pairwise fashion to form a phrase structure, the Bukusu TP is derived as follows:

3. Wangila a-la-xina
Wangile AGR-FUT-dance
Wangila will dance.



Because Bukusu is a null-subject language, *Wangila* can be dropped and the sentence still remains grammatical due to the strong agreement features. The sentence would read:

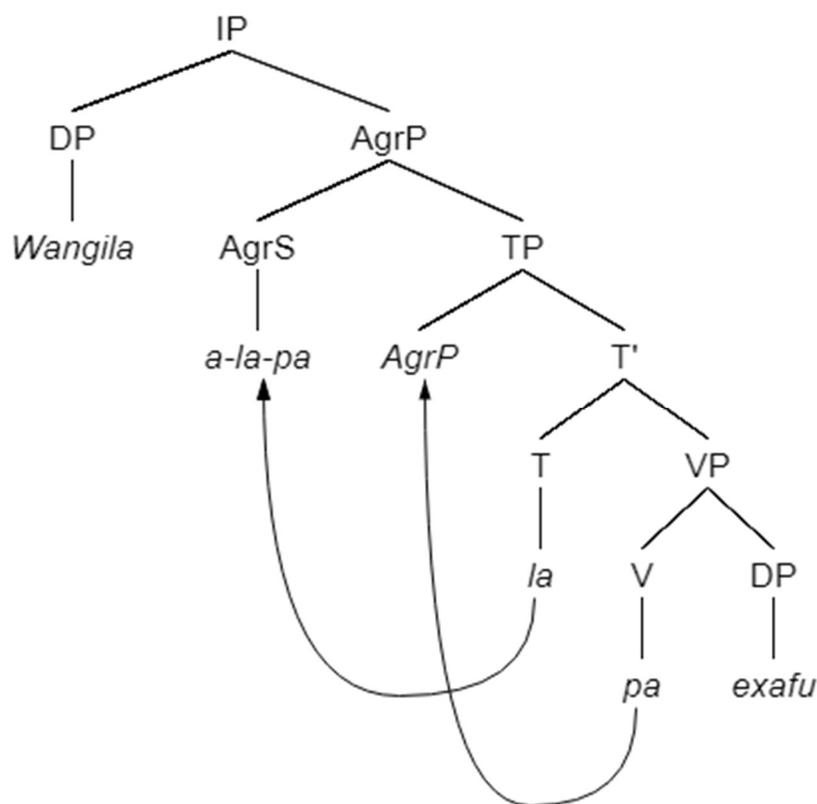
4. A-la-xina
AGR-FUT-dance
He will dance.

The subject in this language agrees with the verb indicating different persons from first-, second-, and third-person singular to plural as seen below:

- | | |
|------------------------|-----------------------|
| 5. <i>Ndaxina</i> | 'I will dance' |
| <i>Ewe olaxina</i> | 'you (sg) will dance' |
| <i>Wangila alaxina</i> | 'he/she will dance' |
| <i>Efwe xulaxina</i> | 'we will dance' |
| <i>Enywe mulaxina</i> | 'you (pl) will dance' |
| <i>Aḽo ḽalaxina</i> | 'they will dance' |

Verb movement in Bukusu involves movement of a finite non-auxiliary verb from the head V position of the VP into the head T position of the TP. This movement involves movement of grammatical and phonetic features of a head, i.e. tense and agreement features. Movement occurs in a successive cyclic fashion as in (6).

- | | |
|-----------------------------------|--------------|
| 6. <i>Wangila a-la-pa</i> | <i>exafu</i> |
| <i>Wangila AGR-FUT-beat</i> | <i>cow</i> |
| <i>Wangila will beat the cow.</i> | |



The verb movement in this case is triggered by the morphological properties and grammatical features of the verb /*pa*/, tense /*la*/ and agreement /*a*/ heads. The verb is in its bound form and therefore has to move for affixation. The morphology of the verb is as follows:

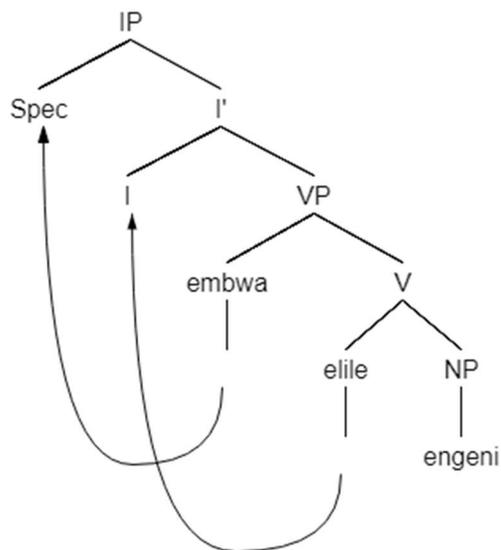
SA	TNS	(OM)	V
a	la		pa

/a/ represents the third-person singular feature for subject-verb agreement, and */la/* the tense feature, which indicates the future tense in this case. The verb must move to tense where the tense morpheme */la/* is affixed to it. The */a/* must move to Spec of AgrP to satisfy surface structure requirements. As a result, the verb moves to check its own morphological features and ensure that it carries the appropriate features. With this brief introduction to verb movement, we can now turn to the discussion on verb and subject raising in matrix clauses.

2. VERB AND SUBJECT RISING IN MATRIX CLAUSES

This section deals with verb and subject raising as one covered by Wh-movement, since this involves movement of the verb and/or subject from a lower position to a higher position in the structure. Verb raising has been a topic of theoretical linguistic interest in Romance and Germanic languages amongst others. Bantu languages also exhibit verb raising as will be seen in Bukusu. We provide an account of Bukusu verb raising to Spec-CP, which is due to agreement and morphophonological, tonal, and word order facts. We assume Chomsky (1989: 43) that the subject is base generated in Spec-VP, that the tensed verb raises to I to pick up agreement and tense (as seen before), that the subject generally raises to Spec-IP to receive nominative case, and that Spec-head agreement takes place between the verb in I and the NP in Spec-IP. The subject-verb agreement is obligatory and is always with the grammatical subject. Grammatical subjects in Bantu languages generally agree with the verb through the use of a subject verb agreement morpheme, as in (7) for instance.

7. Embwa e-lile engeni
 Dog AGR-PAST.eat fish
The dog ate the fish

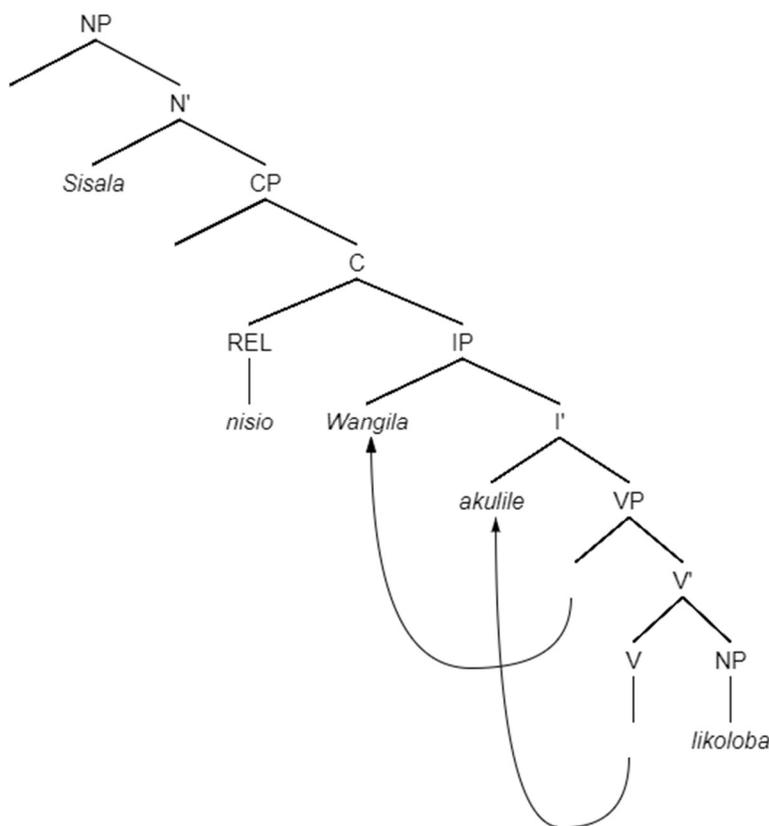


3. VERB AND SUBJECT RAISING IN EMBEDDED CLAUSES

Bukusu preserves the SVO word order in embedded clauses.

8. *Sisala nisio Wangila akulile likoloba.*
 Chair which Wangila bought yesterday.
The chair which Wangila bought yesterday.

Which in this sentence has nothing to do with the Wh-phrase or with what is left behind because the trace is bound by the REL clause word *nisio* 'which'. The REL clause in this case makes an open proposition that has to be bound by something that is outside I and, therefore, is seen as a modifier. Thus, the relative clause as seen in (8) has properties that are associated with a higher C and at the same time marks the beginning of a new sentence.



The subject of the embedded relative clause is *Wangila*, which takes the subject agreement of the verb. REL in Bukusu is an independent lexical item (*nisio*), which inflects to agree with the head noun as seen in (9) below.

9. (a) Sisala nisio Wangila akulile likoloba. (sg)
 Chair which Wangila bought yesterday.
The chair which Wangila bought yesterday.

- (b) Bisala nibio Wangila akulile likoloba. (pl)
 Chairs which Wangila bought yesterday.
The chairs which Wangila bought yesterday.

The REL in Bukusu seems to be irrelevant for verb movement, since the verb raises in all cases. However, note that REL in Bukusu is lexical (i.e. a well formed prosodic word); therefore, it blocks I movement to C. But when REL is a prosodic clitic [that is *sisala nisio* being replaced by *asi-*], I moves to C, and the subject remains in Spec-IP as seen in (10).

10. Wangila akulile sisal likoloba
 Wangila AGR-PAST-bought chair yesterday
Wangila bought the chair yesterday

This sentence can also be said as follows, without mentioning *Wangila*, with the *a* referring to the subject Wangila.

11. A-si-kul-ile likoloba
 AGR-chair-buy-PAST yesterday
He bought the chair yesterday.

Bukusu verb raising is somewhat of a similar phenomenon as that of some Germanic languages with regard to the clause type and pattern of raising to C (Personal communication, Jana Novotna). However, the difference is that in Bukusu, unlike German, verb raising is permitted when C is not filled with some lexical material and prohibits verb raising when C is filled with a complementizer. They seem to have the same pattern, but differ in the clause types in which verb raising occurs. Verb raising to C takes place in matrix clauses in German and is blocked in embedded clauses, while Bukusu does not permit verb raising in matrix clauses and if it is to occur at all then it has to be in an embedded clause. Therefore, in Bukusu, verb raising can only occur in embedded clauses under the condition that the position is not lexically blocked, while in German, matrix clauses project a CP that enables verb raising to occur. Can other languages also project the CP? The reader can refer to Grimshaw (1997) for a discussion on proposals for extended projections. Demuth and Harford (1999: 41) claim that matrix clauses are only IPs in Bantu languages and thus support the fact that the CP is not available in Bantu matrix clauses, explaining why verb raising does not take place in matrix clauses.

4. WH-MOVEMENT IN EMBEDDED CLAUSES

This section discusses Wh-movement in embedded clauses, which entails the extraction of the subject from the embedded clause to the matrix clause. This extraction is possible only if movement applies cyclically and is also dependent on the role of the extracted Wh-phrase

which must function as a complement to the verb within the embedded clause. Let us examine sentences (12a-b) below.

12. (a) Opara oli Wangila kasima
 You think that Wangila me love
 You think that Wangila loves me.
- (b) Nanu niye [opara [oli [t kasima]]]
 Who do you think that me love
 Who do you think loves me?

Wh- movement in embedded questions has the same landing site as that of root questions. The difference is found in the structure of the derivation. In embedded questions the Wh-phrase moves across two CPs to get to its landing site. In (12b), for instance, the phrase in which the [Wh] is extracted functions as the complement of the verb *think*; therefore, the Wh-phrase is extracted from the complement phrase. This phrase also contains a filled comp and it also involves movement of an overt Wh-phrase. Thus, one would expect the resulting structure to be ungrammatical because extraction of the subject via questioning passes through two CP's, a case of long movement, but it is not according to PIC because it moves from one phase to another. It is impossible for the Wh-word to reach the final CP in one possible swoop. It has to get to the edge of each phase one at a time. Stopping along the way in long movement is necessary for this construction to ensure that the construction is accessible to the next place of movement, which according to the A-Bar Subject Theory should not allow movement from an embedded clause because stopping along the way ensures accessibility to the next place of movement (Branigan 1996: 68). Again, one should be able to extract a Wh-phrase from an embedded clause as long as the start is at the edge of the clause. Thus, the A-Bar Theory makes the correct prediction for Bukusu subject extraction on long movement.

It is worth pointing out that the function of a phrase in an embedded clause determines its outward movement as a Wh-phrase. In (12b) above, the construction remained grammatical after the cyclic movement because it functioned as a complement of the verb *think*, thus the Wh-phrase was extracted from the CP. As a result, one can conclude that complements in embedded clauses in Bukusu are not islands in Wh-movement according to the Island Condition which stipulates that an island is a structure that does not allow any constituent to be extracted from it (Radford 1997:513) nor a phrase that contains the Wh-phrase out of which it can be moved (Carnie 2002:306). Subjects, however, are islands as seen in (13a-b) below.

13. (a) M [bara [ndi [Wangila kasima]]]
 I think that Wangila me loves.
 I think that Wangila loves me.
- (b) *Nanu niye [mbara [ndi [t kasima]]]
 Who do I think that me loves
 Who do I think loves me?

Sentence (13b) is ill-formed since the noun phrase *Wangila* functions as the subject of the verb *mbara* ‘think’ and, as a result, cannot be extracted as a Wh-phrase. With this, we conclude that islands in Wh-movement consist of subjects and not complements in the Bukusu language.

5. THAT-T-EFFECT

This section discusses the That-t effect, a principle which refers to a situation that prohibits Wh-movement and other extractions from the subject position in embedded clauses headed by a complementizer (Pesetsky 1982:297). What this means is that subjects cannot undergo Wh-movement when they are to the immediate right of *that*, *if*, or a *Wh-phrase*. If they do, they result in ill-formed structures. However, the That-t effect does not hold in Bukusu because subjects undergo Wh-movement when they are to the immediate right of *that*, *if* and *Wh-phrase* while the resulting structures remain well formed. The category of the past tense morpheme found within an embedded clause also plays a role in extraction of a Wh-phrase, with the immediate past tense category blocking Wh-phrase extraction when it is to the immediate right of the C ‘that’. The That-t effect phenomenon is widely known for European languages, as seen in the English example below.

14. (a) *Who had they said that would bring the pizza.

(b) Who had they said would bring the pizza?

On the other hand, the sentences in (15a-b) illustrate the That-t effect in Bukusu.

15. (a) Wangila alomile [bali [Wafula alarera engeni]]
Wangila said that Wafula will bring fish.

(b) Nanu niye Wangle alomile [bali [t alarera engeni?]]
Who did Wangila say that will bring fish

In the above example, the trace is immediately adjacent to *bali* (‘that’). After extracting the subject and taking it past *that* into its [Wh] position, the sentence still remains grammatical. According to the principle, the sentence should be ungrammatical like the English version, but this is certainly not the case in Bukusu. This case illustrates the cyclic movement of the Wh-phrase as seen below.

Nanu niye Wangila alomile [bali [t alarera engeni]]

Nanu niye (‘who’) raises to become Spec-CP and, when it does this, satisfies PIC and the shortest move convention principle because it is the closest thing that C attracts. By doing so it positions itself at the edge of the next phase and subsequently into the [Wh] position at the beginning of the sentence. What if the subject is at a fair distance from *that*? Example (16a) illustrates this.

16. (a) Wangila alomile bali Wafula kebile kuxuwe kamatore
 Wangila said that Wafula stole for grandmother bananas
Wangila said that Wafula stole his grandmother's bananas.

If we question the object *kamatore* 'bananas' in the above sentence, we get the sentence in (16b).

- (b) Sina nisio Wangila alomile [bali [Wafula kebile kuxuwe t]]
 What did Wangila say that Wafula stole grandmother belong
What did Wangila say that Wafula stole that belonged to his grandmother?

Sentence (16b) illustrates a case where the extracted subject *kamatore* ('bananas') is at a fair distance from *bali* ('that') yet is still a grammatical sentence. This sentence would be derived as follows.

Sina nisio Wangila alomile [bali [Wafula kebile kuxuwe t]]


This sentence illustrates the cyclic movement, and as long as movement goes via a cyclic procedure, PIC is satisfied. However, tense affects movement of subjects in this language, when they are adjacent to *bali* 'that.' as evidenced in (17)

17. (a) *Nanu niye alomile [bali [t a:bóne Lynn?]]
Who did he say that saw (immediate past) Lynn

The past tense in Bukusu is split into four different categories that are marked by tone.

Immediate Past (few minutes)	a:bóne	'he saw'
Intermediate Past (hours ago)	abone	'he saw'
Near Past (a day ago)	a:bóné	'he saw'
Remote Past (before yesterday)	ábóna	'he saw'

The verb in its immediate past produces an ill-formed sentence as seen as (17a) while it is not the case with the remote past, near, and intermediate past tenses as in (17b-d) below.

- (b) Nanu niye alomile [bali [t ábóna Lynn]]
Who did he say that saw (remote past) Lynn.
- (c) Nanu niye alomile [bali [t abone Lynn?]]
 Who did he say that saw (intermediate past) Lynn
- (d) Nanu niye alomie [bali [t a:bóné Lynn?]]
 Who did he say that saw (near past) Lynn

Examples in (18) illustrate the Prepositional Phrase *musirekere muno* ‘in this village’ in locative inversion, which also shows the effect of That – t – effect in that it is adjacent to *bali* ‘that’ and its Wh-movement in questioning results to a grammatical structure.

18. (a) Wangila alomile [bali [musirekere muno baxana batuma basoleli.]]
 Wangila said that in village this girls exceed boys
Wangila said that in this village girls outnumber boys.
- (b) Musirekere sina nisio Wangila alomile [bali [t baxana batuma basoleli]]
 In village which did Wangila say that t girls outnumber boys?
Which village did Wangila say that girls outnumber boys?

Sentence (18b) violates movement that the That-t effect posits, but it is well formed in Bukusu. Inverted locatives in Bukusu function as grammatical subjects. The Bukusu inverted locative in the above sentence shows various properties typical of subjects in general (i.e. subject raising, subject extraction). Thus, locatives and subjects behave in the same way, i.e. they are extracted from the same position. Therefore, they should be subject to the same constraint: That–t–effect. Some Bantu languages allow locatives to occur in both post verbal position and in pre-verbal position. For a detailed discussion in Chichewa and Sesotho Bantu languages that exhibit this, the reader should refer to Demuth and Mmusi (1997) and Bresnan and Kanerva (1989), respectively.

In conclusion, Bukusu exhibits the That-t effect with subjects and the Prepositional Phrase (PP) in locative inversion position adjacent to *bali* (‘that’) being extracted through questioning and resulting to well-formed structures when in real sense they are not meant to be extracted via movement from the position to the right of the complementizer according to the principle. We, therefore, conclude that the That-t effect does not hold in Bukusu. Now we may examine Wh-movement in embedded clauses under the principle of Subjacency that governs the cyclic application in long movements.

6. SUBJACENCY

This section examines Subjacency as discussed under the Principle of Minimal Compliance (PMC), which governs the cyclic application in long movement. Richards (1998:605) defines subjacency as follows: “A [+wh] complementizer cannot be associated with a Wh-phrase via movement in a way that crosses barriers of a certain kind (Wh-islands, complex noun phrases, etc.)” Complex NPs are typically barriers to movement in Wh-clauses (Richards 1998: 607). Barrier is here defined by Muller and Sternefeld (1993: 462) as “XP is a barrier for A iff X includes A and X is not directly selected.”

With the Subjacency Constraint, the range within which a Wh-phrase can move is restricted. Therefore, when the Wh-phrase moves across the barriers, it results to an ill-formed structure. Subjacency has been claimed to apply only to overt movement. Richards (1998:605) further claims that subjacency is not simply a constraint on representations, but moves are also evaluated for obedience to subjacency as they occur. And if a move violates subjacency, it cannot be saved by a later move’s having triggered the PMC. This happens in cases where one move triggers the PMC in a way that allows another move to occur, in which case the first move must precede the second.

As predicted by the subjacency constraint, one would expect sentences in Bukusu to be ill-formed because extraction of the Wh-phrase through questioning takes place through movement across barriers. However, the resulting structures are well formed. Therefore, the subjacency principle does not hold in Bukusu as seen in the following examples. The view held here is that the apparent long distance move of the Wh-phrase is as a result of cyclic short movements. In the example provided in (19), Wh-phrases are in bold.

19. (a) Wangila alomile bali Wafula kaloma ali John kalia kamatore
Wangile said that Wafula said that John ate bananas

If we question *kamatore* ('bananas'), we arrive at the following sentence:

- Sina nisio** Wangila alomile [bali [Wafula kaloma [ali [John kalia t]]]]
What did Wangila say that Wafula said that John ate

(19a) contains a subjacency violation because movement takes place across barriers, yet the resulting sentence is well formed. In this case a violation of the [+Wh] complementizer being associated with a Wh-phrase *sina nisio* ('what') via movement across barriers; the Wh-comp whose specifier is occupied by *that*.

- (b) **Nanu niye** Wangila alomile [ali [Wafula kaloma [ali [t kalia kamatore]]]]
Who did Wangila say that Wafula said that ate bananas.

- (c) **Nanu niye** Wangila alomile [ali [t kaloma [ali [John kalia kamatore]]]]
Who did Wangila say that said that John ate bananas.

Sentences (19a-c) show multiple Wh-movement to a single Wh- complementizer since there are three phrases that can be questioned via extraction from different positions. These phrases are underlined and they include the NP in object position in (19a) and the NP in subject position in (19b-c), respectively.

In languages with overt Wh-fronting, Bukusu included, there occurs obligatory overt fronting of only one Wh-phrase, leaving other Wh-phrases in-situ as seen in cases where more than one Wh-phrase exists and all can be questioned via movement. Grewendorf (2001:90) claims that in such cases Wh-fronting does not consist of moving individual Wh-elements separately to Spec CP; instead these individuals form a Wh-cluster prior to movement, and a single complex Wh- element therefore, undergoes movement to Spec-CP. In sentence in (20b-c), the first of the Wh-phrases in bold undergo movement while the underlined phrases are left in-situ, *nanu* ('who') questioning John and *sina* ('what') the object *kamatore* ('bananas') respectively.

20. (a) Wangila alomile [ali[Lynn kaloma [ali [John kalia kamatore]]]]
Wangila said that Lynn said that John ate the bananas.

- (b) **Nanu niye** Wangila alomile [ali [t kaloma [ali [nanu kalia kamatore]]]]
Who did Wangila say that said that who ate bananas.

- (c) **Nanu niye** Wangila alomile [ali [t kaloma [ali [John kalia sina]]]]
 Who did Wangila say that said that John ate what.

Is it possible that multiple Wh-fronting can take place? Let us examine (20d) below.

- (d) **Nanu niye** Wangila alomile [ali [t kaloma [ali [t kalia kamatore]]]]
 Who did Wangila say that said that ate bananas.

We assume the formation of the Wh-cluster represented by the two **t**'s and hence the existence of 'multiple' Wh-fronting, which in this case involves the first two Wh-phrases. However, the meaning of the sentence changes, with the second Wh-phrase referring to *Wangila* the subject, having eaten the bananas and not *John* where the extraction took place, and who is responsible for having eaten the bananas. Does this mean, therefore, that multiple Wh-fronting does not take place in Bukusu? One example is not sufficient enough to draw some conclusion; thus, further work is needed on this topic but rests beyond the scope of this paper.

7. CONCLUSION

This paper set out to explore the concept of Wh-movement in Bukusu by examining the principle of successive cyclic Wh-movement and the mechanisms that underlie the extraction from CP complements. This was done by analyzing the NP movement through questioning in the embedded clause, the Complementizer Trace Phenomena (That-t effect) and the principle of subjacency. Wh-movement in embedded clauses, which entails the extraction of the subject from the embedded clause, is possible only if movement applies cyclically and is also dependent on the role of the extracted Wh-phrase which must function as a complement to the verb within the embedded clause. The That-t effect which rules out Wh-movement from a subject position adjacent to an overt complementizer does not hold in Bukusu because the resulting structures after movement are well formed. Extraction of the Wh-phrase from the Complementizer Phrase which is to the immediate right of a C *bali* ('that'), depends on the tense within the clause with the immediate past tense blocking extraction. As predicted by the Subjacency Constraint, examples from Bukusu reveal that the constraint does not hold because movement takes place across barriers resulting to well-formed structures and not ill-formed as predicted by the Subjacency Constraint. Therefore, long distance movement of the Wh-phrase in Bukusu is as a result of cyclic short movements.

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