The Optionality of EPP in Dholuo

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ABSTRACT:
This paper argues that the relatively free position of subjects in Dholuo (Nilo-Saharan; Kenya, Tanzania) provides remarkably clear evidence that the specifier positions of preverbal functional projections in the language need not be filled. In this sense, the language provides direct evidence for a strong parameterization of the classic EPP (or equivalent conditions), one that allows the existence of languages where *no* DP need occupy the specifier position of any verbal functional projection at any level of representation. Furthermore, it is shown that the optionality seen in subject raising extends to other movement types of the language, including wh-movement. This suggests a picture where the presence of an 'EPP-feature' (Chomsky 2000) on a given functional head is systematically optional in the language. Finally, it is argued that the existence of a limited set of environments where subject raising is obligatory provides support for the theory of Agreement locality put forth by Bobaljik & Wurmbrand (2005).

1. Introduction: The Cross-Linguistic Generality of the EPP

A well-known feature of English and many other languages is the requirement that every finite clause contain an overtly expressed, preverbal subject, even in clauses where the presence of such a subject is not (clearly) semantically motivated.

(1) a. *(It) is believed that certain grammatical principles are universal.
b. *(It) is raining.
c. *(There) is a dog in the yard.

Following common usage, I refer to the condition responsible for the facts in (1) as 'the EPP'.

Since its first systematic study by Chomsky (1981), the exact nature of the EPP has remained an elusive and controversial question.[1] While numerous accounts have been proposed, (almost) all share the consequence that, in languages where the putative condition is active, the following property holds: [2]

(2) **The EPP as a Surface Generalization**
In a finite main clause, the specifier of some verbal functional projection (IP, TP, AgrP, AspP, etc.) must be filled.

Consequently, the intimately related issue of whether this condition holds for all human languages rests on whether the generalization in (3) is accurate.

[1] I will not attempt a broad survey of the voluminous literature concerning the EPP, its nature and cross-linguistic generality. Interested readers are directed to Svenonius (2002) as a starting point.

[2] A notable exception, which will be returned to throughout, is the work of Alexiadou & Anagnostopoulou (1998). They propose that the condition responsible for the data in (1) can in some languages be satisfied by verb-raising. Thus, in their system, a language observing the EPP might allow for clauses where (e.g.) SpecTP is unoccupied, just as long as the verb has itself has moved to the head of that projection.

(3) **The Universality of EPP**
For all human languages, in a finite main clause, the specifier of some verbal functional projection (IP, TP, AgrP, AspP, etc.) must be filled.[3]

Naturally, the generalization in (3) is a null hypothesis; in the absence of clear counter-examples, it must be assumed that the generalization holds. It is quite interesting, then, that it has thus far proven difficult to counter-exemplify this generalization. While (3) has been challenged by some (McCloskey 1996, Alexiadou & Anagnostopoulou 1998 [4], Doron 2000, Roberts 2005, Bobaljik & Wurmbrand 2005), features of the languages in question lead the argumentation to be relatively indirect. Thus far, discussion has generally centered on three kinds of phenomena: post-verbal subjects in Romance and Greek (4a), V-initial languages such as Irish and Biblical Hebrew (4b), and 'low' subjects in (V2) Germanic languages (4c).[5]

(4) a. <u>Post-Verbal Subjects in Romance and Greek</u>
Ne sono cadute molti.
of.them are fallen many
Many of them fell. (Burzio 1986)

b. <u>V-initial Languages Such as Irish</u>
Laghdaigh ar a neart
decreased on his strength
His strength decreased. (McCloskey 1996)

c. <u>Low Subjects in Germanic</u>
Weil ja doch Linguisten Kammermusik spielen.
since PRT linguists chambermusic play
Since (some) linguists are playing chamber music. (Diesing 1992).

In each of the above cases, the overt subject exhibits syntactic and/or semantic properties that indicate a 'low' position in the clause – below (e.g.) SpecTP – and there does not appear to be any other phrasal material that could be occupying the 'higher' specifier positions of the verb's functional projections. Consequently, such cases seem at first blush to falsify the claim in (3).

However, certain features of these languages serve to complicate and therefore weaken the force of such arguments. For example, while the 'low' position of the post-verbal subjects in cases like (4a) and (4b) is generally undisputed, the languages in question tend to be *pro*-drop. Thus, there exists the possibility that such clauses have a structure akin to those in (5) below, where the specifier position of a verbal functional projection is occupied by *pro* (Taraldsen 1980, Rizzi 1982).

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[3] If we include the work of Alexiadou & Anagnostopoulou (1998), then the generalization in (3) should read:
"…the specifier position of some verbal functional projection must be filled, *or verb movement to that functional projection must occur*."

[4] Again, while Alexiadou & Anagnostopoulou challenge the letter of (3), they claim that the counter-exemplifying languages still obey the condition responsible for (1). The relevant condition is simply circumvented by V-movement to T.

[5] More recently, Bobaljik & Wurmbrand (2005) have argued that certain scope-freezing phenomena associated with topicalized VPs in German provide indirect evidence that the condition in (2) does not hold for that language.

(5) a. [$_{TP}$ *pro* [$_{TP}$ T [$_{VP}$ ne sono cadute molti]]]

b. [$_{AgrP}$ Laghdaigh$_2$+T$_1$+Agr [$_{TP}$ *pro* [$_{TP}$ T$_1$ [$_{VP}$ V$_2$ ar a ghlór]]]]

Consequently, arguments against (3) based upon structures like (4a,b) hinge upon comparatively abstract and theory-internal auxiliary arguments that they could not contain such a null pronominal.[6] Furthermore, while the existence of a null pronominal is generally ruled out for Germanic structures like (4c), the hierarchical position of the putatively 'low' subject is more debatable. Bobaljik & Jonas (1996), for example, argue that such subjects do in fact occupy SpecTP, and that the possibility of these clauses does not truly challenge (3).

We find, then, that to date the primary challenges to the generalization in (3) hinge upon relatively technical – and therefore disputable – auxiliary assumptions. Of course, no linguistic argument is free from technical assumptions, but it would be fair to say that the nature of the assumptions at play in the arguments to date leave for significant doubt as to whether the generalization in (3) has truly been falsified.

This paper seeks to remedy this situation. It will be shown that a rather transparent argument against (3) can be found in the variable position of subjects in Dholuo, a relatively understudied Nilo-Saharan language of Kenya and Tanzania.[7] The argument hinges on the possibility of sentences like the following, where a passive subject remains in a post-verbal position, and does not raise to the higher, preverbal position typical for subjects in the language.

(6) Ne ok one **Onyango** gi Ochieng'
PAST NEG see.PASS Onyango by Ochieng'
Onyango was not seen by Ochieng'

We will see that various binding tests reveal that the post-verbal subject in (6) does indeed remain low, within the VP. However, we will also see that the general impossibility of *pro*-drop and expletive subjects in Dholuo rules out the possibility of there being an expletive *pro* within the higher specifier positions of such sentences. Furthermore, we will see that various other imaginable ways of making sentences like (6) consistent with (3) either fail empirically or are egregiously *ad-hoc*.

Besides providing clear evidence against (3), the present paper will show that the optionality of subject raising in Dholuo extends to other movement types in the language, including wh-movement. The picture that emerges is one in which the presence of 'EPP-features' (Chomsky 2000) on the functional heads of Dholuo is systematically optional. On the other hand, we will also see that there are certain environments where subject raising is *obligatory* in the language. It will be shown that the necessity of subject raising in these

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[6] For example, Alexiadou & Anagnostopoulou (1998) claim that the structure in (5a) would wrongly predict the presence of 'definiteness effects' with such post-verbal subjects. Their argument, however, is based upon controversial assumptions regarding the source of definiteness effects in English existentials. Similarly, McCloskey (1996) argues that the structure in (5b) would violate a (now obsolete) condition on Chain Uniformity, while Roberts (2005) argues that it would wrongly predict certain consonantal mutations (in Welsh). I do not wish to imply that these arguments are necessarily invalid, only that they are less direct than that which can be based upon the Dholuo data presented below.

[7] For general reference works on Dholuo, I refer the reader to Omondi 1982, Tucker 1994, and Okoth-Okombo 1997. The only formal study of the syntax of Dholuo is Omondi 1982, though there exists numerous works on the morpho-phonology of the language, particularly its notoriously complex consonantal mutation rules.

environments need not be due to an obligatory EPP-feature, but rather follows from the theory of Agreement locality put forth by Bobaljik & Wurmbrand (2005).

In the end, this paper will not put forth an original hypothesis regarding the nature of the condition in (1)/(2), nor will it advocate for any prior hypotheses.[8] It is hoped, however, that research into these matters will be advanced by the data presented here, in that that they raise the question of why the condition at play in (1) should fail to hold in a language like Dholuo, a language that, as we will see, is in many relevant respects quite like English.

The remainder of this paper is structured as follows. After some brief background regarding the Dholuo language, the next section presents the basic facts regarding the possible subject positions in the language. Following this, I establish two key claims regarding the preverbal subject positions: (i) they are A-positions, and (ii) they are indeed restricted to subjects. With these basic facts in place, I argue in Section 4 that sentences containing post-verbal subjects violate the generalization in (2), and so provide clear evidence against (3). Following this, Section 5 discusses and analyzes certain remaining facts regarding the pivotal Dholuo structures. In Section 6, I turn our attention to the A-bar movements of the language, particularly wh-movement. I demonstrate that, as with subject raising, wh-movement in the language is wholly optional. Section 7 presents the main analysis of the facts presented thus far, and puts forth the notion that EPP-features are systematically optional in the functional heads of Dholuo. Finally, Section 8 presents additional evidence in support of the analysis. It is shown that, when combined with the theory of Agreement locality developed by Bobaljik & Wurmbrand (2005), the proposed account correctly predicts that – despite its general optionality – subject raising in Dholuo will actually be *obligatory* in certain environments.

2. Basic Facts Regarding Dholuo

2.1 Dholuo: Some Preliminary Background

Dholuo (< *dho luo* 'Luo language') is a Nilo-Saharan language spoken by the approximately 3.5 million Luo people living near the eastern coast of Lake Victoria, in Kenya and Tanzania. Like its Nilotic relatives, the language is largely isolating, and possesses little verbal or nominal morphology. Except for the facts discussed in Section 2.2, the language is rigidly SVO. The following is a typical transitive clause in the language.

(7) Ochieng' ne ok oneno Onyango.
Ochieng' PAST NEG saw Onyango
Ochieng didn't see Onyango.

Before we turn to the properties of its grammatical subjects, certain morpho-syntactic facts should be made clear. The first concerns the verbal form *oneno* in (7). In sentence (7), this verbal form is composed of the root *nen* 'see', the prefix *o-* 'perfective' and the TAM/Voice suffix *-o*.[9] In a sentence such as (8), however, it has a different composition.

[8] Indeed, to my knowledge, there is no theory of the EPP that predicts it not to hold in certain languages. This is, of course, largely due to the scarcity of evidence against (3).

[9] The complex distribution of this suffix is not relevant to our discussion here. I refer interested readers to the works cited in footnote 7.

(8) Ne ok oneno Onyango.
PAST NEG he.saw Onyango
He didn't see Onyango.

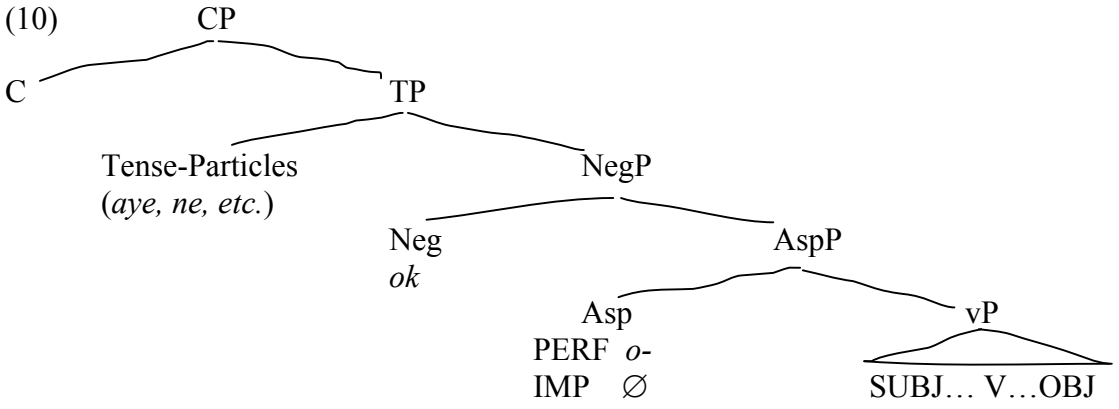
In (8), the verbal root is actually preceded by two prefixes of the form *o-*: the perfective prefix found in (7), as well as the third person subject clitic *o-* 'he'. Thus, the underlying phonological form of the verb is *o-o-nen-o* (he-PERF-see-TAM/Voice), with the two prefixes coalescing into a single vowel. This point will be of importance to understanding certain later examples.

The second fact to mention concerns the particle *ne* glossed as 'PAST' above. This particle is one of a family of so-called 'tense particles' in the language. As illustrated below, the precise meaning of the particle is 'past, within today'.

(9)	a.	a(ye)	*very recent past (just happened)*
	b.	ne(nde)	*recent past 1 (any time today)*
	d.	nyo(ro)	*recent past 2 (any time yesterday)*
	e.	nyo(cha)	*recent past 3 (any time more than two days ago)*
	c.	ne(ne)	*remote past tense 1 (at least several days ago)*
	f.	yande	*remote past tense 2 (at least several days ago)*
	g.	ang'	*near future tense 1 (later today)*
	h.	kiny	*near future tense 2 (some time tomorrow)*
	i.	orucha	*near future tense 3 (at least two days from now)*

Following prior literature, I assume that these particles either are true tenses, or are temporal adverbials.[10] Thus, I assume that these particles are generated either as T-heads or as adjuncts to TP. Furthermore, I assume that the negative particle *ok* is the head of a NegP. Consequently, I assume that the base structure of a Dholuo clause is as represented in (10).

(10)



[10] The exact status of these (optional) particles – as either tenses or adverbs – is presently unclear. Both Omondi (1982) and Tucker (1994) regard them as tenses, but they also note that many of them are homophonous with independent (post-verbal) adverbs. On the other hand, not all the particles in (9) are homophonous with post-verbal adverbs (e.g. *a(ye)*, *ang'*), and it's certainly the case that not all post-verbal adverbs can appear in the preverbal positions available to the particles in (9). Given that the particles in (9) form a closed-class and have meanings common in the tense systems of surrounding languages (such as Kikuyu (Barlow 1951)), I am inclined to regard them as tenses. However, all that is crucial for the arguments presented here is that they are base-generated somewhere within TP.

I assume that the AspP above is headed by the aspectual morphemes (*o-* 'perfective', ∅ 'imperfective'), but that these heads must obligatorily lower to V at PF.

With these basic facts and assumptions in place, let us now turn to the phenomenon of key interest: the relative freedom of subject position in the clause.

2.2 The Phenomenon of Central Interest: The Subject Positions of Dholuo

As illustrated below, in a Dholuo sentence, the subject may be freely positioned either before or after tense, or before or after negation.[11]

(11) **(Ochieng')** ne **(Ochieng')** ok **(Ochieng')** oneno Onyango.[12]
Ochieng' PAST NEG saw Onyango
Ochieng didn't see Onyango.

Interestingly, passive subjects and clausal subjects are allowed an additional, post-verbal position.

(12) **(Onyango)** ne **(Onyango)** ok **(Onyango)** one **(Onyango)** gi Ochieng'.
Onyango PAST NEG see.PASS by Ochieng'
Onyango wasn't seen by Ochieng'.

(13) a. Ne ber **[ni otimo kama no]**
PAST good that he.did way that
It was good that he did that.

b. **[Ni otimo kama no]** ne ber.[13]
that he.did way that PAST good
That he did that was good.

This post-verbal position is not permitted for the DP subjects of active verbs. The presence of the subject *Ochieng*' in the post-verbal positions below is felt to be sharply ungrammatical.

(14) Ne ok oneno **(*Ochieng')** Onyango **(*Ochieng')**
PAST NEG saw Ochieng' Onyango

Finally, it is important to note that while subjects may occupy the preverbal positions in (11), other arguments may not; the preverbal (A-)positions are wholly restricted to subjects.

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[11] Some speakers judge sentences where the subject intervenes between the verb and negation as 'clumsy', but comprehensible and 'forgivable'. However, other speakers, including Omondi (1982) and Okoth-Okombo (1997), report the possibility of such orders without comment.

[12] In the notation used in examples (11)-(15), exactly one of the DPs in parentheses must be present in the sentence.

[13] Speakers tend to dislike placement of a clausal subject between the verb and either negation or tense. This may be due to a general 'functional' preference for clauses to be peripheral. However, there is also the possibility that preverbal subjects are base-generated in their high position (Koster 1978, Alrenga 2005 Moulton 2009). I leave this important question to future research.

(15) Ochieng' (***Onyango**) ne (***Onyango**) ok (***Onyango**) oneno (**Onyango).**
Ochieng' Onyango PAST NEG saw
Ochieng didn't see Onyango

These basic facts have been widely reported in the descriptive literature on Dholuo.[14] A major goal of this paper is to provide an accurate formal account of these facts, one that connects them with other intriguing properties of Dholuo grammar. In so doing, we will see that a proper understanding of this basic pattern entails that the condition in (2) does not hold for Dholuo. To start building our way towards our analysis, we begin in the following section by establishing a key fact: the preverbal subject positions in (11) are A-positions, and not A-bar positions.

Before we leave this introductory section, however, let us note a difficult issue regarding intransitive subjects. First, the subjects of active intransitive verbs – like subjects of active transitives – cannot be post-verbal.

(16) a. (**Ochieng'**) ne (**Ochieng'**) ok (**Ochieng'**) ower (***Ochieng'**)
Ochieng' PAST NEG sang
Ochieng didn't sing.

b. (**Ot)** wang' (***ot**)
house burn
The house is burning.

Interestingly, as shown above, the impossibility of post-verbal position extends to the subjects of (semantically) unaccusative verbs, including *wang'* 'burn', *two* 'dry', *dongo* 'grow', and *luar* 'fall'. If we assume that unaccusative subjects are generated in the same position as passive subjects and clausal subjects (*i.e.*, CompVP), then the impossibility of the post-verbal subjects in sentences like (16b) constitutes an outstanding problem for the analysis put forth here. On the other hand, there seems to be a general insensitivity in Dholuo to the (semantic) distinction between unaccusative and unergative predicates. That is, there don't seem to be *any* grammatical properties in the language that distinguish a class of unaccusative verbs from one of unergatives.[15] Thus, we might for the moment reduce the unexpected behavior of unaccusative subjects in (16b) to a broader pattern of unexpected behavior. While (16b) remains an important puzzle, I will need to put it aside here.

3. Preverbal Subject Positions are A-Positions

In this section, I will argue that the preverbal positions occupied by the subjects in (11)-(13) are A-positions. The evidence for this will come from the observable properties of movement from post-verbal position to these preverbal positions. We will see that such movement differs from clear A-bar movement in Dholuo with respect to (i) its ability to obviate Principle C violations, and (ii) its toleration of 'weak cross over'.

[14] For earlier discussions of these facts, see Omondi 1982, Tucker 1994 and Okoth-Okombo 1997.

[15] While the two-volume grammar of Tucker (1994) distinguishes a number of lexical sub-classes in the predicates of Dholuo, no category akin to 'unaccusative' vs. 'unergative' is identified.

3.1 Obviation of Principle C by Movement to Pre-Verbal Position

Let us begin by establishing that Principle C holds in Dholuo. First, discourses like the following reveal that cataphora is generally possible in the language.

(17) Pamba en wuoi ma ber. Ka inger**e$_1$**, to **Pamba$_1$** nyaka nyier.
Pabma is boy REL good if you.tease.**him** FOC **Pamba** must laugh
Pamba is a good boy. If you tease him$_1$, Pamba$_1$ always laughs.

Structures like (17) reveal that there is no general 'linear precedence' constraint governing pronominal anaphora. Given this, the following contrast is especially instructive.

(18) a. Pamba en wuoi ma ber. **Pamba$_1$** ohero guog**e$_{1/2}$** [16]
Pabma is boy REL good Pamba loves dog.his
Pamba is a good boy. Pamba$_1$ loves his$_{1/2}$ dog.

b. Pamba en wuoi ma ber. **O$_{2/*1}$**-hero guog **Pamba$_1$**
Pabma is boy REL good he.loves dog Pamba
Pamba is a good boy. He$_{2/*1}$ loves Pamba's dog.

In (18a), the pronominal possessor inside the direct object *gouge* 'his dog' can co-refer with the c-commanding subject *Pamba*. In (18b), however, the pronominal subject clitic *o-* 'he' cannot co-refer with the possessive R-expression *Pamba*. Given the general possibility of cataphora in Dholuo (17), the contrast between (18a) and (18b) is best explained via appeal to Principle C: a pronoun in Dholuo cannot co-refer with an R-expression that it c-commands.

Having shown that Principle C is active in the language, let us now show that A-bar movement in Dholuo is not able to obviate Principle C violations. Consider the focus-movement structures below.

(19) a. Pamba$_1$ ok ohero japuonje$_1$, to goug**e$_{1/2}$** to **Pamba$_1$** ohero.
Pamba NEG loves teacher.his but dog.**his** FOC **Pamba** loves.
Pamba$_1$ doesn't love his$_1$ teacher, but his$_{1/2}$ dog Pamba$_1$ loves.

b. Pamba$_1$ ok ohero japuonje$_1$, to guog **Pamba$_1$** to **o$_{2/*1}$**-hero.
Pamba NEG loves teacher.his but dog **Pamba** FOC **he**.loves
Pamba$_1$ doesn't love his$_1$ teacher, but Pamba$_1$'s dog, he$_{2/*1}$ loves.

As in (18a), the pronominal possessor inside the focus-moved direct object in (19a) can co-refer with the subject *Pamba*. However, as in (18b), the pronominal subject in (19b) cannot co-refer with the possessive R-expression inside the focus-moved direct object. Thus, we find that focus-movement of the possessive phrase in (19b) does not alleviate the Principle C violation present in its base structure. Consequently, focus-movement in Dholuo exhibits the following property, typical for movement to an A-bar position: it does not obviate a violation of Principle C.

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[16] Recall from Section 2.1 that in (18a) the verb *ohero* is to be parsed as *o-her-o* 'PERF-love-TAM/Voice', while in (18b) the same surface form *ohero* is to be parsed as *o-o-hero-o* '3sgS-PERF-love-TAM/Voice'. The same contrast holds for the verbal forms in (19) and (20).

The following data illustrate that this property also holds for wh-movement in Dholuo.

(20) a. Picha n**e$_{1/2}$** mane ma **Ochieng'$_1$** ohero?
picture of.**him** which C **Ochieng'** likes
Which picture of him$_{1/2}$ does Ochieng'$_1$ like?

b. Picha ni **Ochieng'$_1$** mane ma **o$_{2/*1}$**-hero?
picture of **Ochieng'** which C **he.**likes
Which picture of Ochieng'$_1$ does he$_{2/*1}$ like?

Thus, we find that (as expected) wh-movement is unable to obviate violations of Principle C.

Importantly, while wh-movement and focus-movement cannot obviate Principle C violations, movement to a preverbal subject position can. Consider the sentences below.

(21) a. Ne ber ni **Otieno$_1$** [ni nyamin**gi**$_1$ obiro] [17]
PAST good for **Otieno** that sister.**their**$_1$ came
It was good for Otieno$_1$ that his$_1$ sister came.

b. Ne ber n**e$_{2/*1}$** [ni nyamin **Otieno$_1$** obiro]
PAST good for.**him** that sister **Otieno** came
It was good for him$_{2/*1}$ that Otieno$_1$'s sister came.

c. [ni nyamin **Otieno$_1$** obiro] ne ber n**e$_{1/2}$**
that sister **Otieno** came PAST good for.**him**
That Otieno$_1$'s sister came was good for him$_{1/2}$.

As predicted by Principle C, the pronominal dative argument of *ber* 'good' in (21b) cannot co-refer with an R-expression in the lower subordinate clause.[18] However, as shown in (21c), such co-reference becomes possible if the clause is moved to a preverbal subject position. Thus, we find that unlike focus-movement and wh-movement, movement to a preverbal subject position can obviate violations of Principle C, a property typical of movement to an A-position.

This effect is even more striking with passive subjects. Consider the data below.

(22) a. Ne ok oher [japuonj **Otieno$_1$**] gi **en$_{2/*1}$**
PAST NEG like.PASS teacher **Otieno** by **him**
Otieno$_1$'s teacher is not liked by him$_{2/*1}$

b. [Japuonj **Otieno$_1$**] ne ok oher gi **en$_{1/2}$**
teacher **Otieno** PAST NEG like.PASS by **him.**
Otieno$_1$'s teacher is not liked by him$_{1/2}$.

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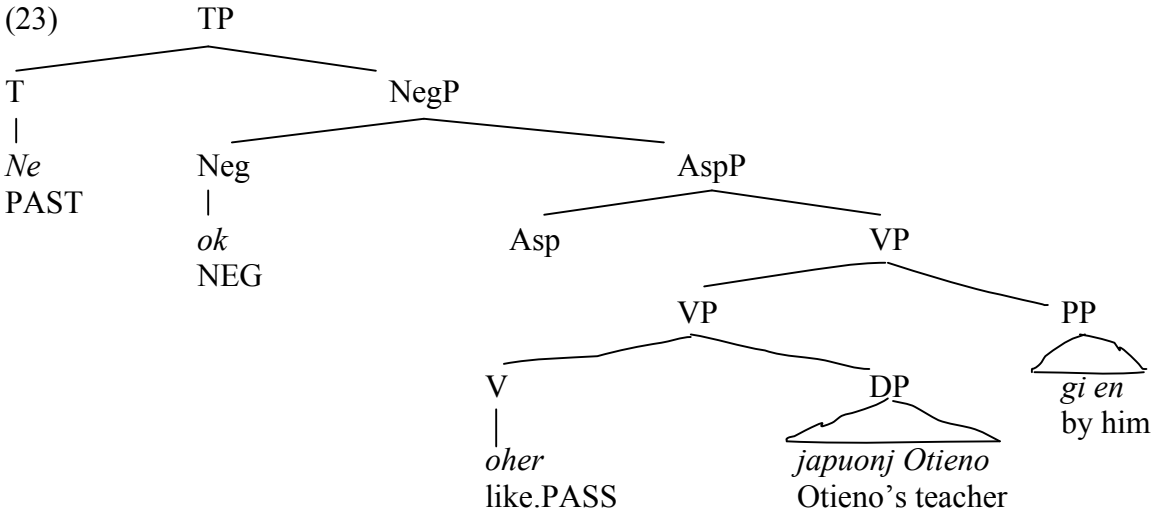
[17] Certain NPs – such as familial terms – require plural possessive pronouns, even when the possessor is semantically singular. Thus, the plural possessive pronoun *–gi* 'their' is actually interpreted as co-referent with *Otieno*, despite its surface plural form.

[18] This follows from Principle C if we make the natural assumption that the pronominal complement of *ni* 'for' in (21b) must 'bind out of' the PP.

As shown in (22a), a pronominal 'by-phrase' complement cannot co-refer with an R-expression contained in a postverbal subject. Interestingly, however, if the passive subject is moved to a preverbal subject position, such co-reference becomes possible (22b).[19] If the ill-formedness of (22a) is due to a Principle C violation, we again find that movement to a preverbal subject position is able to obviate that violation, a property indicative of movement to an A-position.

But, is the ill-formedness of (22a) truly due to a violation of Principle C? It would be if the by-phrase in (22a) were to c-command the postverbal subject, as in the structure below.

(23)



Some independent evidence for this configuration is the fact that 'by-phrase' complements are able to bind pronouns within post-verbal passive subjects.

(24) Oher wuon**gi**$_1$ [gi **wuoi ka wuoi**$_1$]
love.PASS father.**his** by **every.boy**
Every boy$_1$ *loves his*$_1$ *father.* (Literally '*His*$_1$ *father is loved by [every boy]*$_1$)

As we will see in the following subsection, pronominal binding in Dholuo is sensitive to c-command. Thus, the possibility of a bound reading in (24) confirms that a by-phrase complement 'binds into' into a post-verbal passive subject. Consequently, the activity of Principle C in Dholuo predicts the impossibility of (22a). Furthermore, consider the possibility of structures like (25).

(25) Oher **Pamba**$_1$ gi japuonj**e**$_1$.
love.PASS **Pamba** by teacher.**his**
Pamba$_1$ *is loved by his*$_1$ *teacher.*

As we see here, a post-verbal subject can co-refer with a pronominal inside the by-phrase, just so long as that pronominal is contained *within* the by-phrase complement. This again suggests that the key problem with (22a) is that the pronoun binds into the post-verbal passive subject, entailing a violation of Principle C.

[19] Note that this co-reference is also possible when the subject comes between the verb and tense, or between the verb and negation.

In summary, we see that movement of a post-verbal subject to preverbal position can alleviate a Principle C violation inherent in the base structure. This distinguishes such movement from clear-cut cases of A-bar movement in the language, and groups it with A-movement across languages. Consequently, the preverbal subject positions are best classified as A-positions.

In the following section, we will see that certain additional facts support this conclusion.

3.2 Subject-Movement Allows for Weak Cross Over

In this section, we will observe another property that distinguishes the fronting of passive subjects from clear cases of A-bar movement in Dholuo. To begin, let's note the contrast below.

(26) a. Oka [**wuoi ka wuoi**]$_1$ gi guoge$_{2/*1}$
bite.PASS **every.boy** by dog.**his**
Every boy$_1$ was bitten by his$_{2/*1}$ dog.

b. [**Wuoi ka wuoi**]$_1$ oka gi guoge$_{1/2}$
every.boy bite.PASS by dog.**his**
Every boy$_1$ was bitten by his$_{1/2}$ dog.

If we assume that 'by-phrases' c-command post-verbal passive subjects (23), this contrast would follow from the familiar condition that quantificational binding depends upon c-command. That is, the contrast above indicates that (surface) c-command is a necessary condition on binding.

Interestingly, though, the following data indicates that c-command is not a *sufficient* condition for binding.

(27) **Ng'a$_1$** ma gouge$_{2/*1}$ ne okayo.
who C dog.**his** PAST bite
Who$_1$ did his$_{2/*1}$ dog bite?

The structure in (27) is a classic case of 'weak cross over'; although the wh-operator c-commands the pronoun *–e* 'his' on the surface, its base position is structurally lower than the pronoun. Across languages, A-bar movement tends to disallow cases of weak cross over. That is, in many languages, movement of a phrase to an A-bar position does not allow the phrase to bind pronouns that it did not previously bind from its base position. Thus, the impossibility of the bound reading of (27) supports the 'A-bar status' of wh-movement in Dholuo.

Importantly, while A-bar movement does not tolerate weak cross over, A-movement typically does. For example, in the English sentence below, the A-moved subject is able to bind the pronoun *his*, even though it did not bind that pronoun from its base position.

(28) [**Every boy**]$_1$ seems to **his$_1$** mother [~~[**every boy**]$_1$~~ to be an angel] .

With this in mind, consider again the facts in (26). As we see in (26a), the passive subject does not c-command the by-phrase from its (post-verbal) base position. Consequently, fronting of the subject to a c-commanding preverbal position constitutes an instance of weak cross over (as defined above). Thus, the fact that the bound reading is possible in (26b) indicates that such

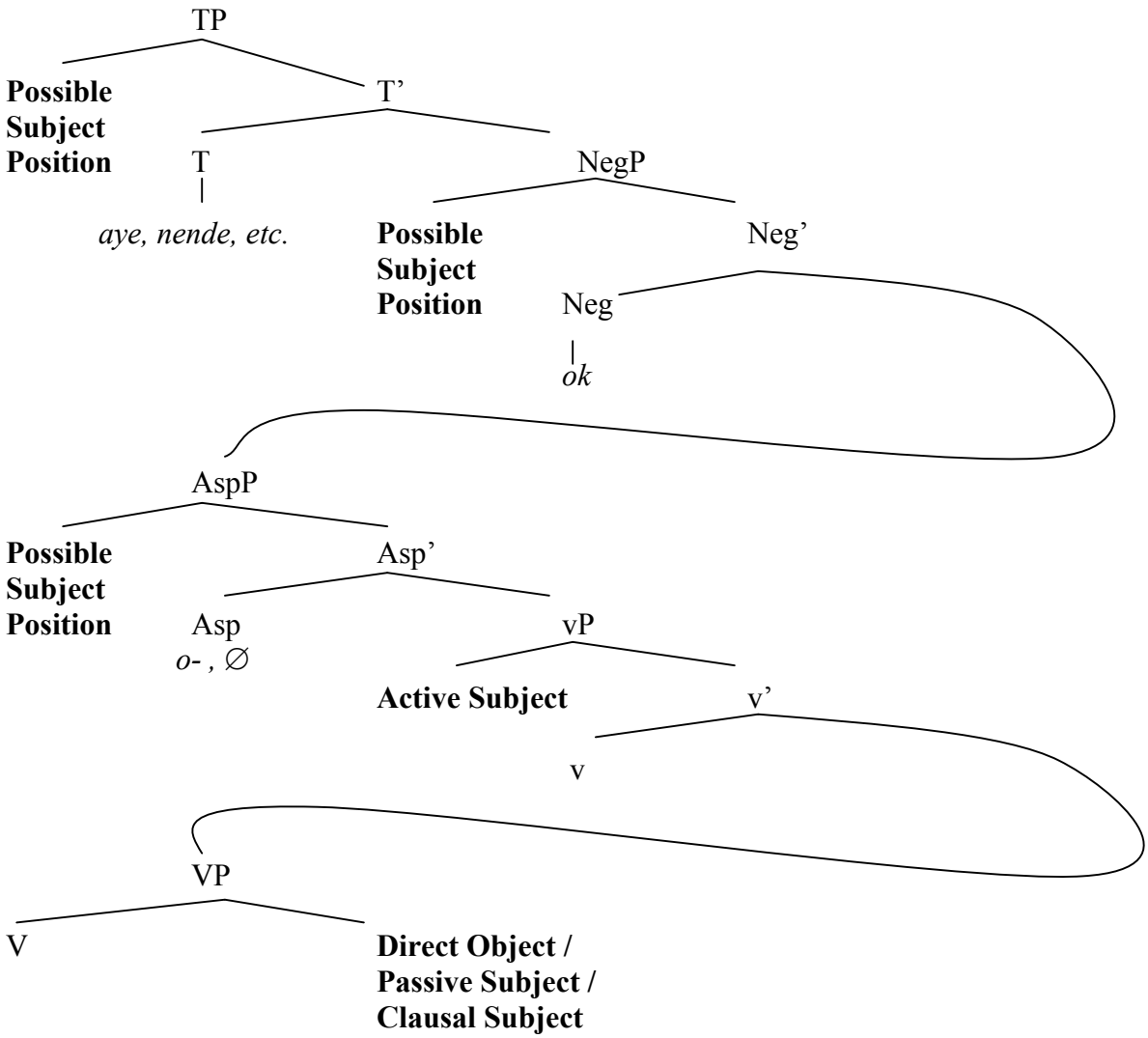
subject-movement tolerates weak cross over. This again distinguishes such movement from cases of A-bar movement (27), and groups it with instances of A-movement across languages.

We find, then, that the contrast seen in (26)-(27) provides further evidence that the preverbal subject positions are indeed A-positions.

3.3 Summary: The Possible Subject Positions of Dholuo

In the preceding sections, we've seen evidence that the preverbal subject positions in Dholuo are indeed A-positions. Given our assumed clausal structure (10), these facts provide concrete evidence that the positions available (and restricted) to subjects are as illustrated below:

(29)



The diagram above represents the following claims. First, active subjects are generated within Spec-vP, while passive subjects and clausal subjects are generated as complements of V, as are direct objects.[20] Secondly, all subjects in Dholuo can (optionally) raise from their base positions

[20] Due to the exceptional behavior of unaccusative subjects in Dholuo, I will make no assumptions here regarding their base positions.

to SpecAspP, SpecNegP, or SpecTP. Finally, all subjects in Dholuo are also able to (optionally) remain within their base position. For active subjects, this entails that they will always occupy preverbal positions.[21] For passive and clausal subjects, however, their base-generation in CompVP entails that they are permitted an otherwise exceptional post-verbal placement.

The simple diagram in (29) is not, of course, an *analysis* of these intriguing facts. For example, it is wholly agnostic regarding the following important questions: (a) *why* do subjects (optionally) raise to those higher functional projections, (b) why are other arguments, such as direct objects, *not* able to raise to those positions, and (c) what is the structure of the 'preverbal field' when subjects remain low in the clause? In the following section, we will begin to address these questions, by seeking an answer to (c). An answer to the questions in (a) and (b) will be proposed and defended once we have examined some puzzling features of Dholuo wh-questions.

Before we turn to these matters, however, let us consider in more detail a key part of the basic proposal in (29): the claim that post-verbal subjects are VP-internal. While this is perhaps an intuitive notion, is there strong empirical evidence in its favor? Can it be shown, for example, that post-verbal subjects *aren't* in a higher functional projection, such as TP?

Indeed it can. To begin, if post-verbal subjects actually occupy SpecTP, there are two possibilities regarding the nature of their position: either it is a left-specifier, or a right-specifier of TP. If it were a left-specifier, then sentences like (30a) would have the structure in (30b).

(30) a. Ne ok one Onyango gi Ochieng'
PAST NEG see.PASS Onyango by Ochieng'
Ongyango was not seen by Ochieng'

b. $[_{CP}$ ne_T + ok_{NEG} +one_V $[_{TP}$ Onyango … $[_{VP}$ gi Ochieng'] …]

Under this analysis, the subject *Onyango* occupies a left-specifier of TP. Given that it is post-verbal, we must assume that the verb *one* 'was seen' has moved along with T and NEG to some even higher functional projection, possibly CP.

This analysis, however, is plagued by the following fatal difficulties. First, it is unclear under this analysis why post-verbal position is only possible for passive and clausal subjects. Given that active subjects can precede tense (7), it's not clear why the verb-movement postulated in (30b) couldn't take place when the verb is active, incorrectly deriving the word-order in (31).

(31) * Ne ok oneno Ochieng' Onyango
PAST NEG saw Ochieng Onyango

Furthermore, recall the facts in (22) and (26), repeated below.

(32) a. Ne ok oher [japuonj **Otieno$_1$**] gi **en$_{2/*1}$**
PAST NEG like.PASS teacher **Otieno** by **him**

b. Oka [**wuoi ka wuoi**]$_1$ gi guog**e$_{2/*1}$**
bite.PASS **every.boy** by dog.**his**

[21] Recall that I assume Aspect heads obligatorily lower to V at PF (Section 2.1). Consequently, no subject – not even active subjects – will be able to intervene between an aspectual morpheme and the verb.

To recall, a post-verbal passive subject cannot co-refer with a pronominal complement of the 'by-phrase' (32a), and cannot bind a pronoun within the by-phrase (32b). It was shown that these facts indicate that post-verbal passive subjects are structurally *lower* than the by-phrase. This fact follows from the structure in (29), but would not follow from the analysis in (30b). After all, if a post-verbal subject occupied SpecTP, it would clearly be possible for the by-phrase to remain within the VP, in a position asymmetrically c-commanded by the passive subject.

From these facts, we can conclude that the analysis in (30b) is incorrect. But, what about an analysis where the passive subject is in a *right*-specifier of TP? Under such an analysis, a sentence like (33a) would have the structure in (33b).

(33) a. Ne ok one Onyango gi Ochieng'
PAST NEG see.PASS Onyango by Ochieng'
Ongyango was not seen by Ochieng'

b. $[_{TP}\ [_{TP}$ Ne $[_{NegP}$ ok $[_{AspP}$ o- $[_{VP}$ one]]]] **Onyango**] …

The analysis in (33b) has the advantage that it predicts the by-phrase in (32a) and (32b) to asymmetrically c-command the passive subject, and so can account for the data in (32). However, it is again unclear under this analysis why the word order in (31) is not possible. Furthermore, recall the facts in (21), repeated below.

(34) Ne ber n**e**$_{2/*1}$ [ni nyamin **Otieno**$_1$ obiro]
PAST good for.**him** that sister **Otieno** came
It was good for him$_{2/*1}$ *that Otieno*$_1$*'s sister came.*

As we saw earlier, a pronominal dative argument of *ber* 'good' cannot co-refer with an R-expression inside a post-verbal clausal subject. We also saw that such co-reference is possible if the clausal subject occupies a higher, c-commanding specifier position (21c). Thus, if it were the case that post-verbal clausal subjects occupied a right-specifier of TP (33b), we would wrongly predict that co-reference between the pronoun and *Otieno* in (34) should be possible.

From these facts, we can conclude that the analysis in (33b) is also incorrect. Thus, we find that it is not possible for post-verbal subjects to be either left- or right-specifiers of TP. The reader will note that the reasoning above generalizes to all functional projections of VP, leading us to the conclusion that post-verbal subjects do not occupy the specifier position of any verbal functional projection, and so do indeed remain within VP.

4. The Optional Emptiness of Verbal Functional Projections

In the preceding section, we saw that post-verbal subjects occupy a low, VP-internal position. Given the prominence of the generalization in (3), this raises clear questions regarding the structure of the preverbal functional projections in sentences where subjects remain post-verbal. Most importantly, when a subject remains VP-internal in Dholuo, is there any phrasal material occupying the specifier positions of any verbal functional projections?

To begin addressing this question, let us consider post-verbal clausal subjects in the language. It is relatively clear that the preverbal subject positions (SpecTP, SpecNegP, SpecAspP) in sentences like (35) are not occupied by any overt material. [22]

(35) Nende ber [ni otimo kama no]
PAST good that he.did way that
It was good that he did that.

Interestingly, if we attempt to insert any kind of 'expletive pronoun' into a preverbal subject position in (35), the result is ill-formed.

(36) * Nende **o**ber [ni otimo kama no]
PAST **it**.good that he.did way that

We find, then, that it is not possible for sentences like (35) in Dholuo to ever contain an overt expletive. This is consonant with the more general impossibility of expletives in the language. In any construction where (e.g.) English requires an expletive subject, Dholuo systematically lacks the expletive. For example, existentials in Dholuo are formed via the combination of a (locative) copula with the adjective *tie* meaning 'present, in existence'. [23]

(37) a. Ni tie duoko.
is present answer
There is an answer.

b. * En tie duoko
it.is present answer

c. * Kanyo ni tie duoko
there is present answer

---

[22] The reader may wonder whether the tense-particle *nende* in (35) couldn't be viewed as occupying SpecTP. However, even if we were to suppose this, it's important to note that tense particles are not obligatory in a Dholuo sentence. Thus, alongside (35), Dholuo allows for sentences like the following.

(i) Ber [ni otimo kama no]
good that he.did way that

In such sentences, it is indisputable that there is no overt material occupying the preverbal subject positions.

[23] The locative copula is used with locative predicates. As shown in (ib) below, when this copula is preceded by a 3rd person pronominal subject clitic, it forms the portmanteau morph *en*.

(i) a. Ochieng' ni e Kenya.
Ochieng' is in Kenya.
Ochieng' is in Kenya.

b. En e Kenya.
he.is in Kenya
He is in Kenya.

Confusingly, *en* is also the basic form of the 'nominal' copula (17).

(ii) Pamba en wuoi ma ber
Pamba is boy REL good
Pamba is a good boy.

Finally, it should be noted that the sequence *ni tie* is typically written as one orthographic word *nitie*.

As illustrated above, if the existential subject is post-verbal, the copula cannot be preceded by any DP, neither the pronoun *it* (37b) nor a locative pronoun such as *kanyo* 'there' (37c). Thus, existential constructions in Dholuo contain no expletive in subject position. Similarly, Dholuo seems to completely lack the 'weather *it*' of English. An 'out-of-the-blue' description of the weather must be structured as in (38a), and (unlike English) cannot be structured as (38b).

(38)	a.	Piny	ng'ich.		b.	Ong'ich
		environment	cold			it.cold
		It is cold. (Lit. '*The weather is cold.*')				*It is cold.*

Speakers report that (38b), with a pronominal subject, can only be used to describe the weather if the weather has already been mentioned in the discourse. Moreover, even under those conditions, speakers report that (38b) is somewhat less natural than (38a), and would be better suited to describing the temperature of some concrete object, such as a glass of water. From this, we may conclude that the 'weather *it*' of the English gloss in (38a) does not exist in Dholuo.[24]

We see, then, that overt expletives do not exist in Dholuo. Returning to sentence (35), one might yet wonder whether it could at all be possible for such sentences to contain a *covert* expletive pronoun. Under that analysis, (35) would have the structure in (39).

(39)	[$_{TP}$	*pro*$_1$	[$_{TP}$	nende	[$_{VP}$	ber	[$_{CP}$	ni	otimo	kama	no	]$_1$	]]]
		pro		PAST		good		that	he.did	way	that		

Such a 'covert expletive' analysis, however, faces a rather fundamental challenge: Dholuo is not generally a *pro*-drop language. As shown below, referential pronouns are necessarily overt.

(40)	a.	Ochieng' ber.	b.	Ober	c.	* Ber
		Ochieng' good		he.good		good
		Ochieng' is good		*He is good.*		*(Cannot mean (40b))*

Consequently, the analysis in (39) must make two rather dubious assumptions: (a) covert pronouns in Dholuo must be expletives, and (b) expletives in Dholuo must be covert pronouns. Given that neither expletives nor covert pronouns are independently attested in Dholuo, the analysis in (39) is egregiously *ad-hoc*, and can be rejected on those grounds.

However, while SpecTP in sentences like (35) does not contain an expletive *pro,* there is another empty category we should consider: an unpronounced higher copy of the CP subject itself. That is, one might wonder whether (35) could have the structure in (41).

(41)	[$_{TP}$	~~[$_{CP}$ ni otimo kama no]$_1$~~	[$_{TP}$	nende	[$_{VP}$	ber	[$_{CP}$	ni	otimo	kama	no	]$_1$	]]]
				PAST		good		that	he.did	way	that		

Under this analysis, the CP has undergone A-movement to a pre-verbal subject position, but is pronounced in its lower pre-movement position. However, while such 'covert raising structures'

[24] Relatedly, there don't seem to be dedicated 'weather predicates' in Dholuo. In order to express a proposition such as 'it is raining', for example, the following structure must be used.

(i)	Koth	chwe.
	rain	falls

have been shown to exist in other languages (Polinsky & Potsdam, to appear), the Principle C facts in (21), repeated below, show that (41) cannot be the correct analysis of (35).

(42) a. Ne ber n**e**$_{2/*1}$ [ni nyamin **Otieno**$_1$ obiro]
PAST good for.**him** that sister **Otieno** came
It was good for him$_{2/*1}$ that Otieno$_1$'s sister came.

b. [ni nyamin **Otieno**$_1$ obiro] ne ber n**e**$_{1/2}$
that sister **Otieno** came PAST good for.**him**
That Otieno$_1$'s sister came was good for him$_{1/2}$.

According to the analysis in (41), there is no difference between (42a) and (42b) in the 'narrow syntax'; their only difference lies in which copy of the CP is selected for pronunciation at PF. Consequently, such an account would fail to predict the contrast between (42a,b). If (42a) were identical to (42b) in the narrow syntax, the obviation of Principle C in (42b) ought to hold for (42a). For this reason, we should conclude that (41) is not the correct analysis of (35) either.[25]

In sum, we have found that in Dholuo sentences containing post-verbal clausal subjects, the preverbal subject positions are unoccupied both at PF and at LF. Thus, the PF/LF structure of sentences like (35) would seem to be that in (43) below.

(43) [$_{TP}$ nende [$_{AspP}$ Ø [$_{VP}$ ber [$_{CP}$ ni otimo kama no]]]]
PAST IMP good that he.did way that

Let us now consider post-verbal passive subjects like those in (44). Can we argue definitively that the preverbal subject positions in such sentences remain unoccupied?

(44) Ne ok one **Onyango** gi Ochieng'
PAST NEG see.PASS Onyango by Ochieng'
Onyango' was not seen by Ochieng'

First, the facts in (37)-(40) again rule out an analysis where SpecTP is occupied by a phonologically null expletive. Secondly, we can also put aside a 'covert A-movement' analysis like (45). Again, such an analysis is easily refuted by the binding data in (26), repeated as (46).

(45) [$_{TP}$ ~~Onyango$_1$~~ [$_{TP}$ ne [$_{NegP}$ ok [$_{VP}$ one Onyango$_1$ [gi Ochieng']]]]
PAST NEG see.PASS Onyango by Ochieng'

(46) a. Oka [**wuoi ka wuoi**]$_1$ gi guog**e**$_{2/*1}$
bite.PASS **every.boy** by dog.**his**
Every boy$_1$ was bitten by his$_{2/*1}$ dog.

[25] It is important here to note that Polinsky & Potsdam (2002, to appear) show that both 'backwards raising' and 'backwards control' allow for the creation of new binding relations. That is, the evidence they present for the existence of higher, unpronounced copies of certain 'low' DPs includes the ability of those DPs to bind pronouns they would otherwise be unable to. Thus, while some instances of covert movement indeed fail to allow 'rebinding' (*e.g.* QR), the covert movement postulated in (41) does.

b. [**Wuoi ka wuoi**]$_1$ oka gi guoge$_{1/2}$
every.boy bite.PASS by dog.**his**
Every boy$_1$ was bitten by his$_{1/2}$ dog.

As we saw earlier for (41), the analysis in (45) predicts that (46a) and (46b) have an identical structure at LF. Consequently, (45) would fail to predict that (46a) – but not (46b) – disallows a bound reading of the pronominal possessor.

We find, then, that the best analysis of Dholuo sentences like (44) is that in (47) below. That is, it seems that in the PF and LF structures of such sentences, the preverbal subject positions are again wholly unoccupied.

(47) [$_{TP}$ ne [$_{NegP}$ ok [$_{VP}$ one Onyango$_1$ gi Ochieng']]]
PAST NEG see.PASS Onyango by Ochieng'

At this point, however, we should note that it has been occasionally proposed in the descriptive literature on Dholuo that sentences like (44) *do* contain an overt, preverbal subject clitic. That is, in some descriptive grammars of the language (Omondi 1982), the construction we've been referring to as 'passive' is labeled 'indefinite subject'. Under this analysis, sentences like (44) contain an indefinite subject clitic, and are analyzed and translated as follows. [26]

(48) Ne ok o-(o-)ne Onyango.
PAST NEG INDEF-(PERF-)see Onyango.
People did not see Onyango.

There are, however, a number of arguments against such an 'indefinite subject' analysis. The first concerns imperfective passives. Depending upon the dialect, imperfective passive verbs either possess no prefix, or possess the prefix *i-*.

(49) Kwon ok (i)ted gi Otieno.
bread NEG make.PASS by Otieno.
The bread is not being made by Otieno.

Under the 'indefinite subject' analysis, one would have to propose that the indefinite subject clitic undergoes allomorphy (to *i-* or ∅-) depending on the aspect of the verb. Such aspect-induced allomorphy, however, is otherwise unprecedented in the pronominal system of Dholuo. It would thus seem simpler to analyze the contrast between perfective and progressive passives as being due to aspectually induced allomorphy of the passive morphology, a phenomenon that is not at all uncommon in the languages of the world.

Another argument against the analysis in (48) is the possibility of 'by phrases'. Under the indefinite subject analysis, sentences like (44) would require the indefinite subject to somehow co-refer with the complement of the by phrase, as illustrated in (50)

[26] At one point in his discussion, Tucker (1994) also translates Dholuo passives into English as active sentences containing indefinite subjects. He also hedges somewhat in his description of the construction as a passive, by labeling it the 'passive equivalent'. However, it's also clear from other parts of his discussion that he views the construction as essentially akin to the English/German passive.

(50) Ne ok o_1-ne Onyango gi Otieno$_1$
PAST NEG INDEF-see Onyango by Otieno
** People$_1$ did not see Onyango by Otieno$_1$*

However, given the activity of Principle C in the language, such binding relationships are otherwise impossible in Dholuo, as illustrated below.

(51) **Gi$_{2/*1}$** -hero Onyango gi **nyiri$_1$**.
they.love Onyango by **girls$_1$**
They$_{2/*1}$ love Onyango by the girls$_1$. (*Cannot mean 'The girls love Onyango'*)
(*Can mean 'They love Onyango and/with the girls'*)

We find, then, that there is strong evidence against the 'indefinite subject' analysis in (48). Moreover, the motivation for such an analysis over a passive analysis is generally unclear. The main argument seems to be the ability for intransitives to undergo the alleged passivization.

(52) Obi chwop ni tho nindo
come.PASS injection for sickness sleep
People have been coming for injection against sleeping sickness. (Tucker 1994)

However, passivized intransitives are well-known from languages such as German, where they are commonly referred to as 'impersonal passives'. Despite the possibility of structures like (53) below, German is generally regarded as having a genuine passive construction. [27]

(53) Es wird geschlafen.
it is slept
Someone is sleeping today. (Lit. "It is slept")

In summary, we find that Dholuo allows the following structures at both LF and PF.

(54) a. [$_{TP}$ nende [$_{AspP}$ ∅ [$_{VP}$ ber [$_{CP}$ ni otimo kama no]]]]
PAST IMP good that he.did way that

b. [$_{TP}$ ne [$_{NegP}$ ok [$_{VP}$ one Onyango$_1$ gi Ochieng']]]
PAST NEG see.PASS Onyango by Ochieng'

Given our interests here, the most striking feature of these structures is the lack of any element occupying the specifier position of *any* verbal functional projection. We find, then, that Dholuo is not subject to the condition in (2), and so the cross-linguistic generalization in (3) is thereby falsified. *There are languages where the EPP does not hold*.

[27] It is worth noting here that the ability to form an impersonal passive like (53) generally distinguishes unergatives from unaccusatives in German. Interestingly, sentences like (52) show that semantically unaccusative verbs like *biro* 'come, arrive' in Dholuo may also form impersonal passives. While this might seem to challenge the view that (52) is indeed an impersonal passive, it nevertheless follows from the broader (unexplained) generalization that semantic unaccusativity is never relevant to Dholuo grammar (Section 2.2).

In the following sections, we will see that this intriguing property of Dholuo has reflexes in other areas of the language's grammar. In particular, we will see that the optionality observed for subject raising extends to other, A-bar movements of the language. These observations will lead us to a particular formal analysis of the patterns witnessed above. Finally, we will see that the proposed analysis receives interesting support from the existence of environments in Dholuo where subject raising becomes *obligatory*.

Before we leave this section, however, let us consider one last alternative to the conclusion that the EPP does not hold for Dholuo. In their work on post-verbal subjects in Romance and Greek, Alexiadou & Anagnostopoulou (1998) argue that the EPP can in some languages be satisfied by verb-movement to T. Under their account, the structure of an Italian sentence like (55a) is indeed that in (55b). However, the lack of SpecTP in the sentence is consistent with their statement of the EPP, given that the verb of the sentence has moved to T.

(55) a Ne sono cadute molti.
of.them are fallen many
Many of them fell.

b. $[_{TP}$ T+ne+sono $[_{VP}$ cadute molti]]]

The analysis in (55b) raises the following question regarding Dholuo structures like (54): could the absence of SpecTP in such structures be due to (string-vacuous) V-movement to T? That is, could such sentences be made consistent with Alexiadou & Anagnostopoulou's (1998) statement of the EPP by assigning them a structure like (56)?

(56) $[_{TP}$ $ne_T + ok_{NEG} + one_V$ … $[_{VP}$ Onyango gi Ochieng'] …]
PAST+NEG+see.PASS

Unfortunately, the V-movement analysis in (56) is faced with a number of significant problems. The first is that the analysis can't explain why a post-verbal position is only possible for passive and clausal subjects. As with the analysis in (30b), it is unclear why the postulated V-movement could not occur with active verbs, incorrectly deriving the ill-formed (31).

A second problem is that the V-movement postulated in (56) is wholly *ad-hoc*. There is simply no reason to suppose that a Dholuo verb forms a complex head with tense and negation. In fact, there is perhaps some evidence against such movement. A major feature of Dholuo morpho-phonology is its process of ATR harmony; within a single morphological word, all vowels must agree in ATR value (Omondi 1982, Tucker 1994). It is worth noting, then, that the vowels of a Dholuo verb needn't harmonize with the vowels of either negation or tense (Omondi 1982). Indeed, this fact partly motivates the orthographic convention of writing these elements as separate words, and provides some (weak) evidence against the H-movement in (56).

A third point against the analysis in (56) is that it is not actually consistent with Alexiadou & Anagnostopoulou's broader theory of the EPP. Under their original account, V-movement in (e.g.) Italian satisfies the EPP in (55b) because Italian verbs contain (rich) subject agreement suffixes. In Dholuo, however, verbs do not inflect for subject agreement. Consequently, even under Alexiadou & Anagnostopoulou's (1998) account, structures like (56) would violate the EPP.

One last argument against (56) concerns the possibility of sentences like (57).

(57) Ne ok Onyango [$_{VP}$ one gi Ochieng']]]
PAST NEG Onyango see.PASS by Ochieng'
Onyango was not seen by Ochieng'.

In (57), the subject intervenes between the verb and the tense/negation particles, and so the verb could not have moved to T. Thus, if such sentences are to be made consistent with the EPP, one must assume that the subject has moved to SpecTP. Given that both the tense and negation particles precede the subject, one would also have to assume that those particles have moved from their base positions to some higher position, as illustrated below.

(58) [$_{?P}$ Ne + ok [$_{TP}$ Onyango … [$_{VP}$ one gi Ochieng']]]
PAST + NEG Onyango see.PASS by Ochieng'

The head movement postulated in (58), however, is entirely *ad hoc*. There is again no evidence that tense and negation form a complex head in sentences like (57). Furthermore, it is unclear what position this complex head could be located in. The most natural proposal might be that T and Neg have raised to some C-head. However, the word-order in (58) is not in complementary distribution with any overt C head.

(59) Aparo [ni ne ok Onyango one]
I.thought that PAST NEG Onyango see.PASS
I thought that Onyango wasn't seen.

Thus, the notion that both tense and negation have moved to a higher position in sentences like (57) does not receive any empirical support. Consequently, we find that in order to maintain the analysis in (56), one must postulate *two* otherwise unmotivated types of head-movement: (a) the V-to-T movement in (56), and (b) the T-to-C movement in (58). I would submit that such an accretion of *ad hoc* assumptions should lead us to abandon analysis (56). Finally, given the failures of that analysis, we must conclude that the structures in (54) are indeed the only viable analyses of Dholuo sentences containing post-verbal subjects. Consequently, it seems to be an unavoidable conclusion that the EPP – the condition responsible for the English data in (1) – just does not hold in Dholuo. The generalization in (3) is false.

5. Two Side-Issues Regarding Passive Subjects, Tense and Negation

Thus far, we have examined a number of facts regarding the position of Dholuo subjects in passive and active sentences. In the following section, we will examine some potentially related properties of A-bar constructions in the language. Before we do, though, I would like in this section to discuss two additional facts relating to the structures examined thus far. Though they are not of direct relevance to the main claims of this paper, they are sure to be known to any students of the Luo language, and so they are prudent to mention here. Moreover, these facts will be of some importance to our later discussion in Section 8.

The first fact to mention concerns pronominal arguments of passive verbs. As noted throughout the descriptive literature on Dholuo, when a passive verb takes a pronominal clitic as argument, the clitic *must remain post-verbal.* The following data illustrate.

(60)	a.	Aheri	b.	Oheri	c.	* Iher
		a-o-her-i		o-her-i		i-o-her
		1sg-PERF-love-2sg		PERF/PASS-love-2sg		2sg-PERF/PASS-love
		I love you.		*You are loved*		

Sentence (60a) illustrates the form of a 2nd person singular pronominal clitic. When such a clitic functions as direct object, it must follow the verbal root, as in (60a). As we might expect, when such a clitic functions as a passive subject (60b), it may remain in its underlying post-verbal position. Curiously, however, we also find in (60c) that this is the *only* position the clitic subject can occupy. Unlike full DPs (12), pronominal clitics functioning as passive subjects must remain post-verbal.

Although a full analysis of these facts is beyond the scope of this paper, we might reduce this interesting pattern to a more general feature of Dholuo pronominal clitics: they can never move beyond VP, into the functional projections of the V. Consider the facts below.

(61)	a.	Ne	ok	**a**neno	Onyango.
		PAST	NEG	1sg.PERF.see	Onyango
		I didn't see Onyango.			
	b.	* Ne	**a**ok	oneno	Onyango
		PAST	1sg.NEG	PERF.see	Onyango
	c.	* **A**ne	ok	oneno	Onyango
		1sg.PAST	NEG	PERF.see	Onyango

As shown above, a pronominal clitic in Dholuo cannot appear in either SpecNegP or SpecTP. We might, then, propose the generalization in (62), and assume that (61a) reflects a structure where the pronominal subject remains in its base position within vP.

(62) A pronominal clitic (in Dholuo) cannot be the specifier of a functional projection of V [28]

If we assume that the vP projection is absent in passives, then the following are the only positions available to passive subjects: (a) CompV, (b) SpecAspP, (c) SpecNegP, (d) Spec TP.

(63) $[_{TP}$ ____ Ne $[_{NegP}$ ____ ok $[_{AspP}$ ____ o- $[_{VP}$ V ____]]]]

Note that these positions are sufficient to account for all the data regarding passive sentences we have thus far seen. Now, if these are indeed the only positions available to passive subjects, then the generalization in (62) straightforwardly predicts the pattern in (60). Basically, a passive clitic subject cannot raise to preverbal position, because the only preverbal positions in passive sentences are the specifiers of functional heads. Thus, the general inability for pronominal clitics to appear within those specifier positions (61)-(62) entails the curious restriction in (60).

[28] This generalization necessarily assumes that vP is not a functional projection of V. While the status of little-v as a functional or lexical head remains a difficult question, the assumption made here seems consonant with the concomitant assumption (made here) that passive Vs project a T, Neg, and Asp, without projecting vP.

A second interesting feature of the 'preverbal field' in Dholuo concerns the relative order of tense and negation. In all the sentences above, the tense particle appears to the left of the negative particle *ok* (64a). While this does seem to be the default order, it is also generally reported that negation may (in certain cases) precede the tense-particle (64b).

(64) a. **Nyo** **ok** Ochieng' omiel.
PAST **NEG** Ochieng' danced
Ochieng' didn't dance (yesterday).

b. **Ok** **nyo** Ochieng' omiel.
NEG **PAST** Ochieng' danced

Indeed, certain authors have claimed that the relative position of tense and negation in Dholuo is generally free (Omondi 1982). Interestingly, however, such complete freedom does not seem to hold in the dialects of all speakers. Thus, while (64a) freely alternates with (64b) and (65a) freely alternates with (65b), (66b) has not been accepted as an alternate to (66a).

(65) a. Ochieng' **nyo** **ok** omiel.
Ochieng' **PAST** **NEG** danced
Ochieng' didn't dance (yesterday).

b. Ochieng' **ok** **nyo** omiel.
Ochieng' **NEG** **PAST** danced

(66) a. **Nyo** Ochieng' **ok** omiel.
PAST Ochieng' **NEG** danced
Ochieng' didn't dance yesterday.

b. * **Ok** Ochieng' **nyo** omiel. [29]
NEG Ochieng' **PAST** danced
(*Cannot mean the same as (66a)*)

Although the variable order of tense and negation remains an outstanding puzzle, it might constitute a purely surface-level phenomomenon. That is, it seems plausible to view the reordering of tense and negation in (64) and (65) as being due to an optional rule of morphological merger at PF, of the kind sketched below (Embick & Noyer 2001).

(67) [TENSE [NEG …] → [NEG+TENSE …]

Such a post-syntactic analysis of (64)-(65) would capture two key properties of this 'T-Neg inversion'. The first is the observation made in the descriptive literature that the relative position of tense and negation in (64) and (65) has no semantic effect (Omondi 1982, Okoth-Okombo 1997). Most importantly, however, a rule akin to (67) could account for the impossibility of

[29] Speakers report that (66b) is acceptable if it is construed as a biased polar question, akin to "didn't Ochieng' dance yesterday?" Thus, the asterisk preceding (66b) indicates that it cannot be interpreted as a declarative clause synonymous with (66a).

(66b). Given that the subject intervenes between tense and negation in (66a), the merger rule in (67) could not apply to its PF structure. Consequently, (66b) could not be derived by (67) as a pure PF alternative to (66a).

Although the facts discussed here deserve further study, I would submit that the preliminary analyses put forth here show that they aren't likely to impact the larger claims of this paper. For this reason, we are warranted in putting these (fascinating) puzzles aside.

6. The Optionality of Wh-Movement in Dholuo

In the preceding sections, we've seen that the movement of Dholuo subjects to preverbal A-positions is wholly optional. In this section, we will examine an interesting parallel between this optional A-movement and one type of A-bar movement: wh-movement.

The optional movement of wh-words in Dholuo wh-questions is widely reported in the descriptive literature. In the examples of wh-questions examined thus far in this paper, the wh-word appears fronted into a left peripheral position (68a). Besides this fronted position, it is also fully acceptable for the wh-word to remain *in-situ* (68b).

(68) a. **Ng'a** ma Achieng' oneno?
who C Achieng' saw
Who did Achieng' see?

b. Achieng' oneno **ng'a**?
Achieng' saw **who**
Who did Achieng' see?

Importantly, such *in-situ* structures are widely reported to not be subject to any special pragmatic constraints. Unlike *in-situ* wh-questions in (e.g.) English, sentences like (68b) may be freely used in out-of-the-blue contexts. As we will soon see in detail, the same can also be said of wh-movement structures like (68a).

At first glance, the free variation between (68a) and (68b) suggests that wh-movement, like subject movement, is optional in Dholuo. Before we settle on this conclusion, however, we should confirm that the putative wh-movement structure in (68a) cannot be reanalyzed as an instance of some other, independent A-bar movement construction in the language. After all, it is not uncommon for pure wh-*in-situ* languages to allow wh-words to undergo independent A-bar movements available to other DPs, such as scrambling, focus-movement, and clefting (Cheng 1991). Thus, a true case of 'optional wh-movement' would have to be a case where wh-words *optionally* participate in a movement construction *that is restricted to wh-words* (Cheng 1991, Denham 2000, Fanselow 2005). Consequently, in order to establish that Dholuo has optional wh-movement, we must check whether the construction in (68a) isn't actually a movement construction generally available to other DPs.

Given constructional inventory of Dholuo, there are two *prima facie* alternative analyses for the putative wh-movement structure in (68a). The first is that it is actually an instance of 'focus-movement' in the language (69a); the second is that it is an instance of clefting (69b).

(69) a. Focus-Movement in Dholuo

Wuoi	moro	**to**	ok	ohero.
boy	some	**FOC**	NEG	she.loves

Some boy, she does not love.

b. Clefting in Dholuo

Pamba	**e**	**ma**	onego	san.
Pamba	**is**	**C**	destroy	dish

It's Pamba that broke a dish.

Let us begin with the possibility that (68a) is an instance of focus-movement like (69a). The principle problem for such an analysis concerns the distribution of the complementizer *ma* and the contrastive focus-partice *to*. Consider the facts below.

(70) a. Wh-Movement Requires the Complementizer *Ma*

* Ng'a	**(to)**	Achieng'	oneno?
who	**FOC**	Achieng'	see

b. Focus-Movement Requires the Particle *To*

* Wuoi	moro	**(ma)**	ok	ohero
boy	some	C	NEG	see.

In Dholuo wh-questions, a fronted wh-word must be followed by the complementizer *ma*.[30] If it is not followed by a particle or followed by a particle other than *ma*, the result is ill-formed (70a). Furthermore, for the speakers I have worked with, a focus-moved DP must be followed by the focus-particle *to*; if it is not followed by a particle, or followed by a particle other than *to*, the result is ill-formed (70b).[31] That is, as shown in (70), only a fronted *wh-word* can be directly followed by the complementizer *ma* (and indeed it *must* be followed by that complementizer). Given these key differences between the constructions in (68a) and (69a), it does not seem plausible to reduce the former to the latter.[32]

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30 This complementizer is also an obligatory feature of relative clauses, such as in (17) and (18).

31 Okoth-Okombo (1997) reports structures where a focus-moved DP is not followed by any particle.

32 The reader may wonder whether one could view the particle *ma* in (68a) as an allomorph of the particle *to* in (69a), one that is conditioned by adjacency to a wh-word. Besides simply being *ad-hoc*, such an analysis is challenged by the marginal ability for *ma* and *to* to co-occur in wh-movement structures like the following.

(i) ?? Ng'a **ma** **to** Achieng' oneno?
who **C** **FOC** Achieng' see
Who (as opposed to other people) did Achieng' see?

While rather marginal, speakers report that structures like (i) are much better than (70a). Importantly, structures like (i) are said to differ in meaning from plain wh-movement structures like (68a). If sentences like (i) mean anything, they are said to imply a contrast between the answer to the wh-question and some other contextually salient entities.

These facts establish two points. First, the (marginal) possibility of (i) shows that *ma* is not some mere allomorph of *to*. Secondly, the semantic differences between (i) and (68a) provide further evidence that the latter cannot simply be reduced to the focus-movement construction in (69a) and (i).

Furthermore, it's worth noting that the marginal status of (i) challenges the following generalization, made by Fanselow (2005):

(ii) Generalization S3 (Fanselow 2005): If a language allows simple partial movement, then wh-phrases can move to focus-positions and can bear focus markers in that language. *(cont'd…)*

Let us, then consider the possibility that (68a) is an instance of the Dholuo cleft-construction illustrated in (69b). Given the closer surface similarity between the two structures, this reanalysis is indeed more plausible, and has been independently proposed in the descriptive literature (Omondi 1982, Tucker 1994). However, we will soon see that there are also some important differences between them.

To begin our discussion, we should observe a curious, as-yet-unexplained property of Dholuo clefts. First, let us note that a referential DP in the focus of a cleft must be followed by the 'focus copula' (71a).[33] Let us also note that such a referential DP cannot be preceded by the 'normal' copula *en* (71b).

(71) a. Pamba **e** ma onego san.
Pamba is.FOC C destroy dish
It's Pamba who broke a dish.

b. * **En** Pamba ma onego san
is Pamba C destroy dish

Interestingly, a complementary set of facts holds for *non*-referential DPs in the focus of a cleft. If a non-referential DP (such as a wh-word) occupies the focus of a cleft, the DP must be preceded by the 'normal' copula *en* (72a). It cannot be followed by the 'focus copula' (72b).

(72) a. **En** ng'a ma onego san?
is who C destroy dish
Who is it that broke a dish?

b. * Ng'a **e** ma onego san?
Who is.FOC C destroy dish

As shown below in (iiib), Dholuo does indeed allow so-called 'simple partial movement' structures.

(iii) a. Onyango duaro ni Pamba ogwe **ng'a**?
Onyango wants that Pamba kick **who**
Who does Onyango want Pamba to kick?

b. Onyango duaro ni **ng'a** ma Pamba ogwe?
Onyango wants that **who** C Pamba kick
Who does Onyango want Pamba to kick?

c. **Ng'a** ma Onyango duaro ni Pamba ogwe?
who C Onyango wants that Pamba kick
Who does Onyango want Pamba to kick?

As one last relevant observation here, note that the semantics of (iiib) show that *ma* is not a marker of wh-scope. Rather, it seems to be a semantically empty complementizer whose appearance requires adjacency to a wh-operator.

[33] The broader syntax and semantics of the 'focus copula' *e* is an unresolved puzzle for future research. Typical of its use is the following contrast.

(i) Pamba en wuoi ma ber.
Pamba is boy REL good
Pamba is a good boy.

(ii) Pamba e wuoi ma ber
Pamba is.FOC boy REL good
Pamba is the good boy.

Although the facts above constitute a compelling puzzle, we will not be concerned with their analysis in the present paper. Rather, their main importance to us here is in establishing the following basic fact: it is indeed possible for a wh-word to be the focus of a Dholuo cleft (73a), and such structures bear a striking resemblance to putative wh-movement structures like (73b).

(73) a. **En** ng'a ma onego san?
is who that destroy dish
Who is it that broke a dish?

b. Ng'a ma onego san?
who C destroy dish
Who broke a dish?

Indeed, the only surface difference between (73a) and (73b) lies in the presence of the copula. This, of course, raises the question of whether the putative wh-movement structures are simply elliptical versions of wh-clefts.

While initially attractive, the reduction of structures like (68a), (73b) to wh-clefts like (73a) is faced with a number of difficulties. The first is simply that the putative 'reduction' or 'ellipsis' would be strictly limited to clefts containing wh-words in their focus. It is not generally possible for the focus of a cleft to appear without a copula.

(74) Pamba ***(e)** ma onego san.
Pamba is.FOC C destroy dish
It's Pamba who broke a dish.

More importantly, speakers report that clear wh-cleft structures like (73a) differ in their meaning from putative wh-movement structures like (73b). For example, the wh-cleft in (75a) may only be used when the speaker assumes that some particular person did not dance, and wishes to know their identity, while (75b) may be used by a speaker who considers it possible that *everyone* danced yesterday. This contrast is further illustrated by the translations volunteered for the two structures.

(75) a. **En** ng'a ma nyo ok omiel?
It.is who C PAST NEG dance
Who was it that didn't dance yesterday?

b. Ng'a ma nyo ok omiel?
who C PAST NEG dance
Who didn't dance yesterday?

The distinctive meaning of (75a) would follow from the broader semantics of clefts in Dholuo. As in many languages, clefts in Dholuo trigger existence presuppositions. For example, the cleft in (71a), repeated in (76a), is infelicitous in the 'out-of-the-blue' context in (76c). It is only felicitous in a context like (76b), where the common ground entails the existence of an entity satisfying the cleft 'remnant'.

(76) a. Pamba e ma onego san. [34]
Pamba is C destroy dish
It's Pamba who broke a dish.

b. Context Supporting Existence Presupposition
You think that Onyango broke a dish. I disagree. I think that, although a dish was indeed broken, Pamba broke the dish, not Onyango.
(*Judgment: I could utter (76a) felicitously*)

c. Out of the Blue Context
While you are away from the house, Pamba breaks a dish. When you come home, I want to inform you of the incident.
(*Judgment: I could not utter (76a) felicitously*)

Thus, we find that the strong existence presuppositions of Dholuo clefts are preserved in clear cases of wh-clefts like (75a). Importantly, the *absence* of such presuppositions from putative wh-movement structures like (75b) suggests that they possess a different underlying structure, and are not just phonologically reduced variants of wh-clefts.

A second contrast between the structures in (75) provides further evidence that (75b) is not based upon a cleft. To begin, as illustrated below, Dholuo clefts possess the exhaustivity entailments that are typical of clefts in many languages.

(77) a. Pamba onego san, to Ochieng' mbende.
Pamba destroy dish and Ochieng' too
Pamba broke a dish, and Ochieng, too.

b. * Pamba e ma onego san, to Ochieng' bende.
Pamba is C destroy dish and Ochieng' too
** It's Pamba that broke a dish, and Ochieng' too.*

Now, due their exhaustivity entailments, English clefts are rather infelicitous in 'mention-some questions'. As illustrated below, an English wh-cleft like (78c) is not truly felicitous in a context like (78a); rather, a plain wh-question like (78b) must be used.

(78) a. Context:
You are trying to design a menu for a child's party. You have no idea what food children these days like, and would like to get some suggestions from a friend.

b. What do children like to eat at parties?
c. *??* What is it that children like to eat at parties?

The infelicity of (78c) in context (78a) seems related to the exhaustivity entailments of English clefts. Intuitively, question (78c) requests an answer of the form *It is X that children like to eat at parties*. Such an answer, however, would need to exhaustively list the foods enjoyed by

[34] The examples in (76) and (77) are based upon the work of Davis *et al.* (2004) on clefts in Salish languages.

children at parties. Besides being pragmatically impossible, such an answer would not be a partial answer of the kind that the context in (78a) and the question in (78b) clearly demand.

It is quite telling, then, that a contrast similar to that in (78) can be seen in Dholuo. Speakers report that in context (78a), one can only use either the wh-*in-situ* structure in (79a) or the simple wh-movement structure in (79b). The clear wh-cleft in (78c) would not be felicitous.

(79) a. Nyithendo ohero chamo **ang'o**? (Felicitous in (78a))
children like to.eat **what**
What do children like to eat?

b. **Ang'o** ma nyithendo ohero chamo? (Felicitous in (78a))
what C children like to.eat
What do children like to eat?

c. **En** **ang'o** ma nyithendo ohero chamo? (*Infelicitous* in (78a))
is **what** C children like to.eat
What is it that children like to eat?

We find, then, that the wh-cleft in (79c) can again be found to possess the semantic properties of the cleft construction upon which it is based. The absence of those properties from the 'plain wh-movement' sentence in (79b) therefore strongly suggests that it has a structure different from (79c), one that is not based upon an underlying cleft. A similar set of facts appears in (80).

(80) a. Context:
I am trying to decide whether or not to invite Ochieng' to my party. I don't know him very well, but you do. I'd like to know more about him, and would like to get you to tell me some things about him.

b. **Ango'** ma ing'eyo kuom Ochieng'? (Felicitous in (80a))
what C you.know about Ochieng'
What do you know about Ochieng?

c. **En** **ango'** ma ing'eyo kuom Ochieng'? (*Infelicitous* in (80a))[35]
is **what** C you.know about Ochieng'
What is it that you know about Ochieng'?

Thus far, we've seen that certain semantic differences between putative wh-movement structures and clear examples of wh-clefts argue that the former are not simply reduced versions of the latter. One final reason against such a reduction concerns a curious property of wh-subjects in Dholuo. As widely reported in the descriptive literature, wh-subjects in Dholuo must undergo fronting; they cannot stay *in-situ*. This fact is mainly indicated by the need for wh-subjects in Dholuo to always be followed by the particle *ma*, as illustrated below.

[35] Importantly, speakers report that (80c) is felicitous in a context like the following: we have been talking about Ochieng' for a while, and you have clearly been evasive in your descriptions of him. It seems you are hiding something about him, and I want to find out what that is.

(81) **Ng'a** ***(ma)** ochamo rech?
who **C** ate fish
Who ate fish?

While the explanation for this fact remains elusive, it is arguably more plausible that certain principles conspire against *in-situ* wh-subjects in the language, rather than require wh-subjects to always appear (*in-situ*) in cleft constructions.

For all the reasons stated above, we can reasonably conclude that wh-movement structures like (68a) are not just (phonologically reduced) wh-clefts. Thus, we find that there is *no* independent A-bar movement process in Dholuo that could be responsible for the left-peripheral position of the wh-word in such structures. Rather, we find that the possibility of a structure of the form in (82) below requires that the left-peripheral XP be a wh-word. That is, structures of the kind in (82) are strictly limited to wh-operators.

(82) $[_{CP}$ XP_1 $[_{CP}$ *ma* $[_{IP}$ … t_1 …]]]

Consequently, it seems fair to conclude that structures like (68a) represent a genuine case of *optional wh-movement*.[36]

Since we have concluded that wh-movement in Dholuo is truly optional, we may thereby conclude that both the following structures are possible LF/PF structures of the language. [37]

(83) a. $[_{CP}$ $\varnothing_C$ $[_{IP}$ Achieng' oneno **ng'a**]]
$C_{[Q]}$ Achieng' saw **who**]]

b. $[_{CP}$ **Ng'a$_1$** $[_{CP}$ **ma** $[_{IP}$ Achieng' oneno t_1]]
who **C$_{[Q]}$** Achieng' saw

In the following section, we will begin to develop a theory of Dholuo grammar that accounts for possibility of both these PF/LF structures.

7. The Proposed Analysis: Optionality of EPP on C, T, Asp and Neg

In this section, we will work our way towards a formal analysis of subject-movement and wh-movement in Dholuo. Our analysis – and the discussion that follows – will assume various notions from older and more recent work within the Minimalist Program (Chomsky 2000, Carstens 2005).

To begin, let us recall from Section 4 that Dholuo allows for all the following structures, both on the surface and at LF.

(84) a. $[_{TP}$ **Onyango$_1$** $[_{TP}$ ne $[_{NegP}$ ok $[_{AspP}$ $[_{VP}$ one t_1]]]]]
Onyango PAST NEG see.PASS
Onyango was not seen.

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[36] Genuine cases of optional wh-movement are now a relatively well-documented (though still quite rare) phenomenon. Interested readers are referred to Denham (2000) and Fanselow (2005).

[37] As to the contrast between $\varnothing_C$ in (83a) and *ma* in (83b), we might suppose that the latter is a reflex of structural adjacency between the wh-operator and the left-peripheral C-head.

b. [$_{TP}$ Ne [$_{NegP}$ **Onyango** [$_{NegP}$ ok [$_{AspP}$ [$_{VP}$ one t_1]]]]]
c. [$_{TP}$ Ne [$_{NegP}$ ok [$_{AsP}$ **Onyango** [$_{VP}$ one t_1]]]]]
d. [$_{TP}$ Ne [$_{NegP}$ ok [$_{AspP}$ [$_{VP}$ one **Onyango**]]]]]

We find, then, that Dholuo allows SpecTP, SpecNegP and SpecAspP to all remain unoccupied at LF/PF. From this, we can make a key conclusion regarding the featural composition of the heads T, Neg and Asp in Dholuo. If we assume the existence of 'EPP-features' (Chomsky 2000), as well as the standard assumption in (85), the structures in (84) force us to the conclusion in (86).[38]

(85) **Standard Assumption Regarding the Feature [EPP]**
If a head bears the feature [EPP], then its specifier position must be filled by LF.[39]

(86) **Key Conclusion:** The heads T, Neg and Asp in Dholuo need not bear [EPP].

Thus far, we've concluded that the heads C, T, Neg and Asp in Dholuo *need not* bear EPP-features. Is there any motivation for saying that these heads *ever do* bear such features? While the matter is largely theory-internal, we will see that there is some slightly empirical reason for answering 'yes'. First, let us consider the (typically implicit) assumption in (87). Under this assumption, the possibility of the movement structures in (84) would certainly force the conclusion in (88).

(87) **Second Assumption Regarding the Feature EPP** [40]
If a head *lack*s the feature EPP, then it is not possible to (internally) merge a phrase in its specifier position.

(88) **Second Key Conclusion:** T, Neg and Asp in Dholuo can optionally bear EPP.

The assumption in (87), however, has (to my knowledge) rarely been made explicit. Indeed, there seems to be some conceptual motivation against it. After all, it seems possible to imagine a theory where the alternative assumption in (89) holds.

(89) **Alternative Assumption Regarding the Feature EPP**
If a head lacks the feature EPP, then it's possible – but not required – to (internally) merge a phrase in its specifier position.

Is there, then, any clear argument that can be offered in support of assumption (87) over (89)?

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[38] Note that so-called 'EPP-features' are distinct from 'the EPP', construed as the condition responsible for the data in (1). In a theory admitting of EPP-features, the classic EPP would be equivalent to a statement that the head of a verbal functional projection (such as T) always appears with an EPP feature. Thus, while Dholuo is not subject to 'the EPP', it may nevertheless possess EPP-features. For clarification, I refer the reader to Chomsky (2000).

[39] Note that the statement in (85) does not require the specifier position to actually be filled *at* LF, only to be filled at some point in the derivation *before* LF. Thus (85) does not rule out the ability of subjects to reconstruct to positions below SpecTP.

[40] The restriction to 'internal merge' in (87) may be crucial, if one assumes that specifiers may be externally merged without the need of an EPP feature.

Indeed, there is, *if we also assume that 'free', non-Agreement-driven movement is a grammatical possibility.* If we assume that such 'free' movement is in principle possible, then (87) is needed for a rather natural explanation of the inability of direct objects to occupy the pre-verbal subject positions of Dholuo. Recall the facts in (15), repeated below.

(90) Ochieng' (***Onyango**) ne (***Onyango**) ok (***Onyango**) oneno (**Onyango).**
Ochieng' Onyango PAST NEG saw
Ochieng didn't see Onyango

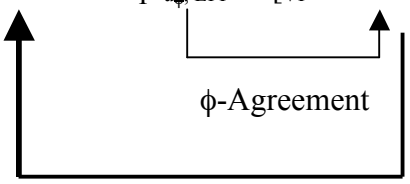
Let us now lay out a rather straightforward (and familiar) account of the data in (90). We will assume that the Dholuo lexicon contains the functional heads below.

(91) a (i) $T_{u\phi}$ (ii) $T_{u\phi\ EPP}$
b. (i) $Neg_{u\phi}$ (ii) $Neg_{u\phi,\ EPP}$
c. (i) $Asp_{u\phi}$ (ii) $Asp_{u\phi,\ EPP}$

That is, we will assume that each of the functional heads T, Asp and Neg in Dholuo bear *uϕ*, and also optionally bear EPP. To simplify our discussion, I will restrict my attention to the Asp heads in (91c); the reader will see that parallel arguments hold for T and Neg.

First, let's see what happens if a Dholuo sentence contains $Asp_{u\phi,EPP}$. As illustrated below, such a sentence will never allow a direct object to occupy SpecAspP.

(92) $[_{TP}$ … $[_{AspP}$ Asp $_{\sout{u\phi,\ EPP}}$ $[_{VP}$ $SUBJECT_{\phi}$ … $OBJECT_{\phi}$] …]



Agree-Driven Movement

If Asp bears *u*ϕ and EPP, it will probe for an interpretable instance of ϕ. The first such feature it will encounter will be that born by the transitive subject. Consequently, the requirement to check all the features of Asp simultaneously will require that the subject check off *both* the ϕ-features of Asp, as well as its EPP-feature. Thus, movement of the subject to SpecAspP is required. Crucially, this deletes *both* the features ϕ and EPP from AspP. Since Asp now no longer has [EPP], assumption (87) entails that no other XP will be permitted to move to SpecAspP. Therefore, the direct object will never be able to 'freely' move into SpecAspP.

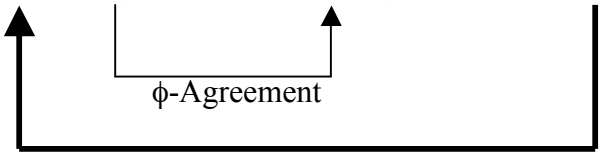
Next, let's consider what happens when a Dholuo sentence contains the head $Asp_{u\phi}$. As illustrated below, such sentences will also not permit direct objects to occupy SpecAspP.

(93) $[_{TP}$ … $[_{AspP}$ $Asp_{\sout{u\phi}}$ $[_{VP}$ $SUBJECT_{\phi}$ … $OBJECT_{\phi}$] …]

Given that $Asp_{u\phi}$ lacks [EPP], (87) clearly entails that *no* XP could ever be (internally) merged into SpecAspP. Thus, the direct object will never be able to 'freely' move into SpecAspP.

We find, then, that the hypothesis in (91) – *when combined with the assumption in (87)* – predicts the impossibility of the pre-verbal direct objects in (90). Importantly, if we replace (87) with the weaker (89), we lose our account of these data. For example, nothing would then seem to rule out the structure in (94).

(94) $[_{TP} \ldots [_{AspP}\ Asp_{\text{~~}u\phi\text{~~}}\ [_{VP}\ SUBJECT_{\phi}\ \ldots\ OBJECT_{\phi}\ ] \ldots]$



Free Movement of Direct Object

Under the weaker condition in (89), it is unclear why a direct object in Dholuo *couldn't* freely move to SpecAspP or any of the other preverbal A-positions. Obviously, this problem could be alleviated by rejecting the possibility of free, non-Agree-driven movement. However, ruling out such movement by fiat seems a more radical solution to the puzzle in (90) than the potentially less controversial assumption in (87).[41]

We find, then, that the inability for direct objects in Dholuo to move to preverbal A-positions supports the stronger assumption in (87). As noted earlier, this assumption and the facts in (84) together entail that T, Neg and Asp in Dholuo can optionally bear the feature [EPP]. Furthermore, the possibility of both the structures in (83) likewise argues that (wh-bearing) Cs in Dholuo can optionally bear EPP. Altogether, then, we are drawn to the generalization in (95).

(95) A functional head in Dholuo has the option of either bearing or not bearing an EPP-feature. Thus, the lexicon of Dhloluo includes all the following heads:

(i)	C_{uWH}	;	$C_{uWH,\ EPP}$	(iii)	$Neg_{u\phi}$	;	$Neg_{u\phi,\ EPP}$
(ii)	$T_{u\phi}$	;	$T_{u\phi\ EPP}$	(iv)	$Asp_{u\phi}$	;	$Asp_{u\phi,\ EPP}$

The generalization in (95) forms our core analysis of the word-order possibilities in (83)-(84). We've already seen in (92) how (95) would predict the possibility of the order in (84c); a (passive) subject can raise to a position between Neg and V when (i) the Asp head bears an EPP-feature, but (ii) no other functional projection does. Moreover, it's also rather clear how (95) predicts the order in (84d); a passive subject may remain post-verbal when no functional projection bears [EPP]. Regarding the order in (84b), a subject can raise to a position between T and Neg when (i) Neg bears an EPP-feature, but (ii) T does not. The following illustrates.[42]

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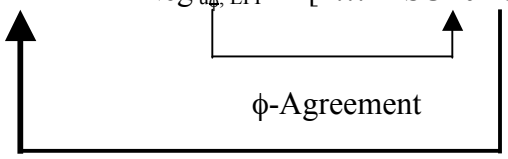
[41] After all, the phenomenon of A-scrambling in languages like Hindi and Japanese seems unlikely to be a case of Agree-driven movement, since it is not sensitive to the ϕ-features, Case or underlying position of the DP moved. Thus, the possibility of non-Agree-driven movement should be allowed by the grammatical architecture.

It's also worth noting that anyone rejecting (87) in favor of (89) would thereby undercut the main argument that Dholuo functional heads *ever* bear EPP-features. Under such a view, Dholuo differs even more radically from languages like English, in that its verbal functional projections *never* bear [EPP].

[42] Note that the derivation of this order does not depend upon the presence or absence of an EPP-feature on Asp.

(96) $[_{TP}$ T $[_{NegP}$ $\text{Neg}_{\text{-}u\phi,\ \text{EPP}}$ [… SUBJECT_{ϕ}] …]

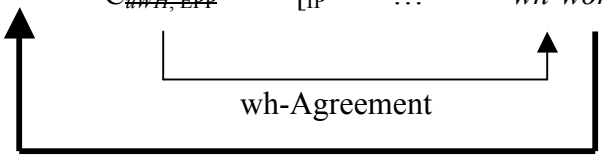


Agree-Driven Movement

Lastly, it should be clear that structure (84a) will be derived whenever T bears an EPP-feature.

We find, then, that key proposal in (95) predicts the full variety of word-orders in (84). It also easily predicts the optionality of wh-movement in Dholuo. Clearly, the wh-*in-situ* structure in (83a) will be derived whenever C_{uWH} fails to bear an EPP-feature. Moreover, as sketched below, the wh-movement structure in (83b) will be derived whenever C_{uWH} does bear EPP.

(97) $[_{CP}$ $C_{\text{-}uWH,\ \text{EPP}}$ $[_{IP}$ … *wh-word* …]]

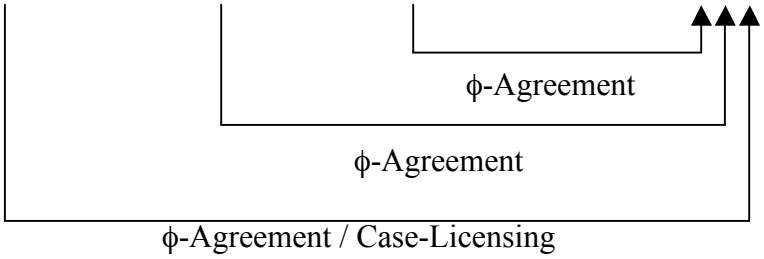


Agree-Driven Movement

Thus, (95) indeed predicts the full array of LF/PF structures we have found for Dholuo.

In the following section, I will present additional evidence for the analysis developed here. Before we come to this, though, let us briefly consider the mechanics by which the Case of a Dholuo subject is licensed. Under our proposal in (95), the heads T, Neg and Asp always bear *u*ϕ. Consequently, each of these heads always undergoes ϕ-Agreement with the subject, even in sentences where the subject does not raise. Thus, T will always undergo ϕ-Agreement with the subject in a Dholuo sentence. If we adopt the common assumption that Nominative Case is licensed under ϕ-Agreement with T, we see that the Case of a Dholuo subject will always be licensed, even in clauses where it remains *in situ*. The following diagram illustrates.[43]

(98) $[_{TP}$ $T_{\text{-}u\phi}$ $[_{NegP}$ $\text{Neg}_{\text{-}u\phi}$ $[_{AspP}$ $\text{Asp}_{\text{-}u\phi}$ $[_{VP}$ V Subject] …]



8. Evidence for ϕ-Agreement with *In-Situ* Subjects

The proposal in (95) states that the functional heads of Dholuo *always* bear *u*ϕ, even when they do not bear EPP. We have seen that this provides a rather simple account of the Case-licensing

[43] Note that since Nominative is only licensed under ϕ-Agreement with T, the Case of the subject is not checked upon its Agreement with Neg and Asp, and so it will remain 'active' for Agreement with T.

of *in-situ* subjects. Interestingly, some further evidence can be found in the existence of certain environments in Dholuo where subject raising actually becomes *obligatory.*

To begin, let us observe that, consonant with the account in (95), other types of A-bar and A-movement in Dholuo appear to be optional. For example, both (contrastive) focus-movement (99) and clefting (100) are fully optional, in the sense that they are not obligatory when their semantic conditions are met.[44]

(99) a. Ochieng' ohero Pamba, to ok ohero Achieng'.
Ochieng' loves Pamba but NEG he.loves Achieng'
Ochieng loves Pamba, but he doesn't love Achieng'.

b. Ochieng' ohero Pamba, to Achieng' to ok ohero.
Ochieng' loves Pamba but Achieng' FOC NEG he.love
Ochieng' loves Pamba, but Achieng' he doesn't love.

(100) a. Ne ok akendo Atieno. Ne akendo Akiny.
PAST NEG I.married Atieno REC.PST I.married Akiny
I didn't marry Atieno. I married Akiny.

b. Ne ok akendo Atieno. Akiny e ma ne akendo
PAST NEG I.married Atieno Akiny IS C PAST I.married
I didn't marry Atieno. It's Akiny that I married.

Furthermore, other instances of A-movement in Dholuo also seem to be optional. For example, several modals in the language freely allow subjects to either precede or follow them.[45]

(101) (**Ochieng'**) nyaka (**Ochieng'**) miel.
Ochieng' must dance
Ochieng' has to dance.

We might follow Omondi (1982) in her assumption that such 'modal particles' are functional heads akin to tense particles and negation.[46] One piece of evidence for such status is the ability of these modal particles to freely permute with the tense particles, as shown below.

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[44] Thus, focus-movement in Dholuo differs from that in languages like Hungarian, where (exhaustively) focused phrases must undergo fronting to a preverbal position (É. Kiss 1998).

Note, however, that 'relativization' appears to be a case of obligatory A-bar movement in Dholuo. That is, Dholuo only permits head-external relatives (i), and does not allow for head-internal relative clauses (ii).

(i) Aneno wuoi ma ihero. (ii) * Aneno (ma) ihero wuoi
I.saw boy REL you.like I.saw REL you.like boy
I saw the boy that you like

At the moment, I have no account of the need for (overt) movement in Dholuo relative clauses.

[45] There are two other modal 'particles' that behave like *nyaka* in (101): *onego* 'should' and *owinjore* 'should'. For reasons of space, the data concerning these other two particles are not given here. However, as I will note throughout, they have been found to possess all the properties of *nyaka* discussed in this section.

[46] Omondi (1982) does not literally make this claim, but rather generates these modals along with T and Neg in a single preverbal 'Aux' position.

(102) Ochieng' (**ne**) nyaka (**ne**) miel. [47]
Ochieng' PAST must dance
Ochieng' had to dance.

As we will soon see, this ability to precede tense distinguishes these modal particles from truly verbal auxiliaries in Dholuo. Given the morphological-merger rule in (67), we might postulate the following, parallel rule.

(103) [TENSE [MODAL …] → [MODAL+TENSE …]

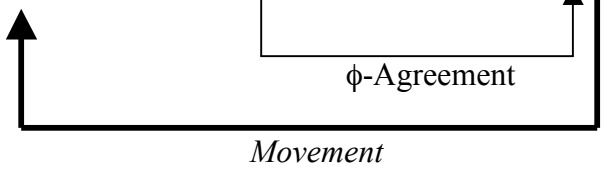
A second piece of evidence for the 'functional' status of these modal particles is their inability to host pronominal subject clitics. The following data illustrate.[48]

(104) a. Nyaka **a**miel. b. * **A**nyaka miel.
must 1sS.dance 1sS.must dance
I must dance.

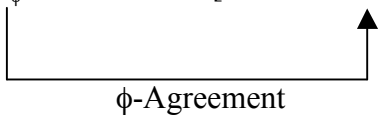
Again, we will see that this inability to host clitics distinguishes these modal particles from truly verbal auxiliaries. More importantly, we saw earlier that Dholuo pronominal clitics are generally unable to occupy the specifiers of functional projections (62). Thus, the facts in (104) would clearly follow from modal particles being functional heads in the extended projection of V.

Under the assumption that modal particles like *nyaka* are functional heads, our proposal in (95) easily captures the data in (101). The following diagrams illustrate.

(105) a. [$_{ModalP}$ Ochieng' [$_{ModalP}$ nyaka$_{\#\phi,EPP}$ … [$_{VP}$ ~~Ochieng'~~ miel] …]



b. [$_{ModalP}$ nyaka$_{\#\phi}$ … [$_{VP}$ Ochieng' miel] …]



As illustrated above, (95) entails that Dholuo modal particles may optionally bear an EPP-feature. When they do, the subject raises to a position preceding them (105a); when they don't, the subject remains *in-situ* in a position following them (105b).

Interestingly, while the A-movement in (101) is wholly optional, there are indeed some environments in Dholuo where such movement appears to be obligatory. Let us begin by observing that a low subject position is not possible with verbal auxiliaries, several of which have a modal semantics. The following illustrates.

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[47] Parallel facts hold for the modal particles *onego* 'should' and *owinjore* 'should'.

[48] Again, parallel facts hold for the particles *onego* 'should' and *owinjore* 'should'.

(106) (**Ochieng'**) nyalo (***Ochieng'**) biro e budho.[49]
Ochieng' might come to party
Ochieng' might come to the party.

Given the inability for subjects to follow auxiliaries like *nyalo* 'can/might', it appears that subject raising is (for some reason) *obligatory* with these heads. Before we settle on this conclusion, however, let us first confirm that the subject in sentences like (106) indeed *raises* to its surface position from a lower, VP-internal position. One piece of evidence for this concerns their available scope interpretations. As shown below, the subject of *nyalo* can be interpreted with low scope.[50]

(107) Ng'at achiel nyalo dhi.
person one can leave
One person can leave. (Can > One)

Sentence (107) can describe a situation where it's possible for *any* one person to leave, and not necessarily a single, specific person. Thus, it must be possible to interpret the indefinite subject of (107) at a position in the scope of the auxiliary *nyalo* 'can'. Consequently, such subjects may reconstruct to a position below the auxiliary, and so they must have originated at such a low position, raising to their surface position in sentences like (107).

Further evidence that the subjects of auxiliaries like *nyalo* have raised to their surface position concerns their permitting certain idiomatic readings.[51] To begin, let us observe that Dholuo possesses the idiom in (108).

(108) Kwach nyiso kite.
leopard shows his.spots
The leopard is showing his spots. *(A person is revealing their true nature.)*

Importantly, this idiomatic interpretation of both subject and predicate is possible even when they are separated on the surface by certain phrasal material. As illustrated below, intervening tense and negation do not interrupt the idiomatic interpretation (109a). Moreover, the idiomatic interpretation is not blocked by an intervening modal particle (109b). Most importantly, verbal auxiliaries like *nyalo* also fail to block the idiomatic interpretation (109c).

(109) a. Kwach ne ok onyiso kite.
leopard PAST NEG showed his.spots
The leopard didn't show his spots. *(Someone didn't reveal their true nature.)*

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[49] There are four other verbal auxiliaries that behave like *nyalo* 'can/might' in (106): *chako* 'start', *weyo* 'stop', *biro* 'will', *seyo* 'PERFECT'. For reasons of space, the data concerning these auxiliaries are not given here. However, as I will note throughout, they have been found to possess all the properties of *nyalo* discussed in this section.

[50] Parallel facts hold for the auxiliary *biro* 'will'. For semantic reasons, it is difficult to run parallel tests on the other auxiliaries (*chako* 'start', *weyo* 'stop', *seyo* 'PERFECT').

[51] I thank Anisa Schardl for first bringing these data and their significance to my attention.

b. Kwach nyaka nyis kite. [52]
leopard must show his.spots
The leopard must show his spots. *(Someone must reveal their true nature.)*

c. Kwach nyalo nyiso kite. [53]
leopard might to.show his.spots
The leopard might be showing his spots.
(Someone might be revealing their true nature.)

If we assume that an idiomatic interpretation requires the idiom-components to be structurally adjacent at LF, the possibility of such interpretation in (109c) entails that at LF, the subject *kwach* 'leopard' must be at a position adjacent to the VP *nyiso kite* 'show his spots'. Consequently, such subjects must be able to reconstruct to a position below the auxiliary *nyalo*, which entails that they raised to their surface position.

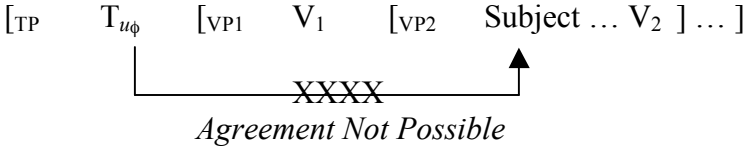
For these reasons, we may conclude that the pre-auxiliary position of the subject in (106) indeed reflects a process of A-movement. Consequently, the inability of this subject to follow the auxiliary indicates that its A-movement in such sentences is, for some reason, *obligatory.*

At first glance, the need for subject raising in (106) seems to deeply challenge the theory of Dholuo A-movement developed in Section 7. After all, if functional heads in Dholuo needn't bear EPP, why is the subject in (106) unable to remain low, in the projection of the main verb? Happily, however, recent work by Bobaljik & Wurmbrand (2005) might provide an answer.

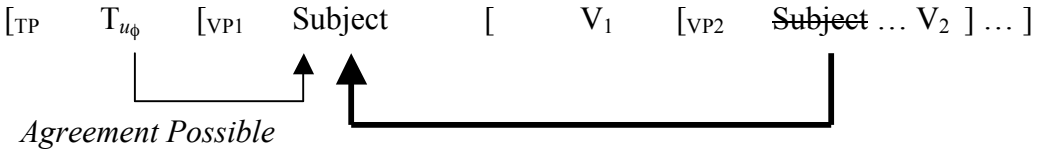
To begin, Bobaljik & Wurmbrand (2005) present evidence that Agreement is subject to the constraint in (110a), which prevents Agreement from occurring in configurations like (110b).

(110) a. Statement of Agreement Domains (Bobaljik & Wurmbrand 2005: 828-831)
Agreement cannot take place across two lexical categories (two VPs)

b. Illicit Agreement Configuration



c. Rescuing Movement of the Subject



Bobaljik & Wurmbrand show that in cases where T must Agree with a DP buried inside two VPs (such as in German restructured complements), movement of the DP to the specifier of the higher VP is required. That is, as illustrated above in (110c), Agreement between T and the DP is made possible when the DP undergoes movement to the edge of the higher VP. Since this

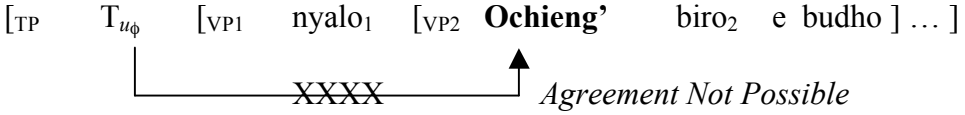
[52] Parallel facts hold for the modal particles *onego* 'should' and *owinjore* 'should'.

[53] Parallel facts hold for the verbal auxiliaries *biro* 'will', *chako* 'start', *weyo* 'stop', *seyo* 'PERFECT'.

movement is the only way to check the ϕ-features of T, such raising of the DP is obligatory in configurations like (110b,c).

It follows, then, that if sentences like (106) have a structure like (110b,c) –where the subject originates in a VP that is itself complement to a V – the theory of Bobaljik & Wurmbrand (2005) would predict the inability of the subject to remain within the lower VP. The following diagrams sketch the proposed analysis.

(111) a. Illicit Agreement Configuration



b. Rescuing Movement of the Subject

Thus, the exceptional behavior of subjects in sentences like (106) would follow from (i) the verbal auxiliaries being truly verbal, rather than functional heads like the modal particles, and (ii) the complements of those auxiliaries being bare VPs.

Is there evidence for these two suppositions, though? First, there is good reason to distinguish the syntactic category of verbal auxiliaries like *nyalo* 'can' from modal particles like *nyaka* 'could'. For example, while modal particles may freely permute with tense (102), auxiliaries like *nyalo* cannot.

(112) Ochieng' (**ne**) nyalo (***ne**) miel. [54]
Ochieng' PAST can dance
Ochieng' could dance.

If the facts in (102) are due to the general rule in (103), the impossibility of the order AUX>TENSE in (112) demonstrates that such auxiliaries are not of the same functional category as the modal particles. Could they, though, simply be of some other functional category?

Further evidence for the truly verbal status of auxiliaries like *nyalo* can be found in the following key fact: unlike functional projections, these auxiliaries *can* host pronominal clitics.

(113) a. **A**nyalo miel. b. * Nyalo **a**miel. [55]
1sS.can dance can 1sS.dance
I can dance.

If the complementary facts in (104) are due to the general condition in (62), we must conclude that auxiliaries like *nyalo* do not head functional projections of V. The most natural alternative would be to suppose that these elements are truly *verbal* auxiliaries, and so are of category V.

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[54] Parallel facts hold for the verbal auxiliaries *biro* 'will', *chako* 'start', *weyo* 'stop', *seyo* 'PERFECT'.

[55] Parallel facts hold for the verbal auxiliaries *biro* 'will', *chako* 'start', *weyo* 'stop', *seyo* 'PERFECT'.

Thus, there is independent evidence that auxiliaries like *nyalo* are V-heads. Finally, let us consider the nature of their complements; is there any evidence that their complements are (bare) VPs? Interestingly, a striking property of the complements of these auxiliaries is their inability to contain negation.[56]

(114) a. Ochieng' **ok** nyal miel.
Ochieng' NEG can dance
Ochieng' cannot dance.

b. * Ochieng nyal **ok** miel.
Ochieng' can NEG dance

The inability for the complement of such auxiliaries to contain negation is akin to the inability for so-called 'restructured complements' in German to contain negation. Wurmbrand (2001) argues that such inability to contain negation is key evidence that the complements in question are bare VPs, as in (110). Consequently, the parallel data in (114) suggest that the complement of auxiliaries like *nyalo* is also a simple bare VP.[57]

Taken together, (112)-(114) give independent motivation for the structure in (111). Again, if we accept that structure, the theory of Agreement domains put forth by Bobaljik & Wurmbrand (2005) predicts the exceptional behavior of subjects in sentences like (106).[58] Conversely, the exceptional need for Dholuo subjects to raise from the complements of verbal auxiliaries like *nyalo* 'can/might' provides novel evidence for Bobaljik & Wurmbrand's theory of Agreement domains.[59] Finally, we should note that the account in (111) crucially relies upon the assumption that T in Dholuo must always undergo ϕ-Agreement with the subject, even in sentences where it remains *in-situ*. Thus, we find further evidence for the key claim in (95): the functional projections of V in Dholuo always bear *u*ϕ, but optionally bear EPP.

9. Conclusion

In this paper, we have taken an extensive tour of A-movement and A-bar movement in Dholuo. We have found that both types of movement in the language exhibit a pervasive optionality. This optionality was claimed to be the result of the generalization in (95): EPP-features are systematically optional in the verbal functional projections of the language. We saw that a key consequence of this generalization is the striking ability of the verbal functional projections (TP, NegP, AspP) to lack specifiers at any level of representation. Thus, Dholuo provides especially

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[56] Parallel facts hold for the verbal auxiliaries *biro* 'will', *chako* 'start', *weyo* 'stop', *seyo* 'PERFECT'.

[57] Interestingly, it is also not possible for the complements of modal particles like *nyaka* to contain negation.

(i) * Ochieng' nyaka **ok** miel.
Ochieng' must NEG dance

Thus, there is reason to suppose that modal particles also take bare-VP complements. Note, though, that since such particles are *functional* heads (not Vs), condition (110a) won't require subjects to move from their complements.

[58] Another environment where subject raising may be obligatory in Dholuo is in copular sentences. Though I leave this matter to future research, it's worth noting that the copula in Dholuo exhibits the 'verbal' properties seen for auxiliaries in (112)-(114).

[59] However, readers familiar with Bobaljik & Wurmbrand (2005) will also note that the reconstruction facts in (107) and the idiomatic interpretation of (109c) challenge their 'Agreement-Scope Correlation'.

clear evidence against the universal generalization in (3): *there are languages where the (classic) EPP does not hold.*

The fact that SpecTP needn't be filled in Dholuo raises obvious questions about those languages where, like English, every TP must have a specifier. In the account put forth here, the ability of SpecTP to remain empty in Dholuo is intimately related to the possibility of *in-situ* wh-words in wh-questions. Interestingly, those languages where the activity of the (classic) EPP is clearest also tend to be wh-fronting languages. Conversely, wh-*in-situ* languages are well-known to generally be head-final languages, where the evidence regarding the activity of the EPP is necessarily more abstract. This raises the question of whether the following generalization is obviously incorrect.

(115) A language is subject to the condition in (2) *iff* wh-movement is obligatory

It may be a simple matter to falsify the generalization in (115). If it is not – if the evidence that (2) may hold for wh-*in-situ* languages tends to be abstract and theory-internal – then it may be that the activity of the EPP is simply a matter of whether EPP-features are generally obligatory on functional heads. At the very least, the ability for EPP-features to be absent from T in Dholuo demonstrates that there is no absolute, formal universal that T be packaged with EPP. If there is indeed a tendency for T and EPP to be packaged in the languages of the world – a matter that has never been systematically studied – we should not discount the possibility that it may be due to more basic diachronic/functional patterns, such as the tendency for subjects to be topical.

Acknowledgments

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