

# Agreeing and non-agreeing hyper-raising in Luyia: Establishing the empirical landscape

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## Abstract

This paper describes subject-to-subject hyper-raising constructions in two Bantu languages of the Luyia subgroup (Tiriki and Logoori) that are spoken in Western Kenya. Both languages have multiple constructions that are plausibly hyper-raising but which are amenable to alternative analyses (either copy-raising or left-dislocation). When subjected to a wide range of diagnostics, these constructions can be shown to be A-movement to matrix subject position out of a finite embedded clause. This represents the first documentation of non-agreeing hyper-raising constructions outside of Halpert's (2016) work on Zulu; we show that the Zulu account cannot be straightforwardly extended to Luyia, raising many analytical questions for future work.

## 1 Introduction

### 1.1 Background on raising predicates

It has been attested in a quite large range of languages that perception verbs like *seem* and *appear* allow constructions in which the thematic subject of their embedded complement CP may appear in preverbal matrix position.<sup>1</sup> In the English example (1), we see that *seems* selects a CP-complement containing the subject DP *the linguists*, presumably in Spec,TP of the embedded clause. In these cases the expletive 'it' occurs in subject position of the matrix clause. In contrast, in the event that the lower clause is non-finite, the thematic subject of the embedded clause appears in the matrix clause (triggering agreement on the matrix verb).

- (1) a. It seems that the linguists are drunk.  
b. The linguists seem to be drunk.

In English, raising out of finite CPs is prohibited, whereas raising out of nonfinite CPs is obligatory, as we see in (2).

- (2) a. \*The linguists seem that are drunk.  
b. \*It seems the linguists to be drunk.

Beyond these patterns, so-called raising constructions have proven significant because the dependency between the lower subject position and the higher one (analyzed as a *movement* relationship) is demonstrably different from other surface-similar constructions, e.g. control constructions. For example, both *hope* and *seem* in English occur with a nonfinite complement clause, as shown in (3).

- (3) a. The linguists **seem** to be drunk.  
a. The linguists **hope** to be drunk.

As the idiom diagnostic in (5) and the expletive construction in (4) show, however, *hope* and *seem* do not pattern identically.

- (4) a. It **seems** that the cat is out of the bag.  
b. \*It **hopes** that the cat is out of the bag.  
  
(5) a. The cat **seems** to be out of the bag. = *the secret seems to have come out*  
b. #The cat **hopes** to be out of the bag. ≠ *the secret seems to have come out*

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These facts, which are consistent across a broad range of languages, have usually been explained in terms that are central to the architecture of generative syntactic theory, which is part of why raising constructions are so theoretically interesting (see, for example, Chomsky 2001). Perception verbs like *seem* and *appear* are analyzed as lacking an external argument whereas control predicates assign a thematic role to an external argument: hence the possibility of an expletive occurring in subject position for raising verbs (4a) but not for control verbs (4b). The subject of a raising verb is assumed to originate as the thematic subject of the lower clause: hence the viability of idioms retaining their idiomatic readings for raising predicates (5a) but not for control predicates (5b). By assumption, idioms must originate as a single constituent in order to be interpreted idiomatically. Therefore, the contrast between raising predicates (*seem* and *appear*) and control predicates (*hope*) is explained (in part) if raising predicates lack an external argument and allow movement into their subject position, whereas control predicates retain an external argument, therefore disallowing movement into their subject position. This is the traditional approach to raising and control (Polinsky, 2013; Davies and Dubinsky, 2004; Haegeman, 1994; Boeckx et al., 2010).<sup>2</sup>

Alongside the thematic properties of the raising and control predicates, this has often been explained in terms of clause size and the properties of CPs as barriers for extraction. Finite CPs are phases within Minimalist syntactic theory, and the Phase Impenetrability Condition blocks raising into a higher clause (therefore the lack of a movement relationship in control predicates, and the impossibility of raising out of a finite CP complement clause for raising predicates). In contrast, the complement of a raising verb (in raising contexts) is an infinitival TP. Infinitival TP is not a phase (on standard assumptions) and lacks the ability to Case-license subjects, motivating the subjects of embedded clauses in sentences like (1b) to raise into a higher clause where their Case may be valued. These explanations are also closely linked with the ability of the embedded and matrix clauses to license nominative case: on Chomsky’s (2001) Activity Condition, DPs are made ‘active’ by uninterpretable Case features, and agreement with a DP values and deletes its Case feature, deactivating that DP. Therefore in a potential raising construction with a finite embedded clause in English (for example), the embedded subject has its Case features valued/deleted by T in the lower clause, and that DP is therefore inactive for further Agree relations. In contrast, with a non-finite embedded clause the embedded subject is not Case-licensed and therefore remains eligible to raise into the matrix clause (Polinsky, 2013; Davies and Dubinsky, 2004; Haegeman, 1994; Boeckx et al., 2010).

## 1.2 Hyper-raising

However, it is becoming quite well-documented that alternative raising patterns are available cross-linguistically for both raising-to-subject and raising-to-object: for recent overview discussions of relevant patterns, see Wurmbbrand (2019), Halpert (2019), and Keine (2020), among others. The pattern that is now becoming familiar from research on Bantu languages is that raising is possible but optional out of finite embedded clauses: §2 addresses some of the existing literature on the topic. This is illustrated for one of the target languages for this paper—Logoori (Bantu, Luyia, Kenya)—in (6) and (7).<sup>3</sup>

- (6) **Logoori**  
ga-rorek-a (ndi) zi-ŋombe zi-r-II **Unraised**  
6SM-seem-PRS (that) 10-cow 10SM-eat-PST  
‘It seems that the cows ate.’
- (7) **Logoori**
- a. zi-ŋombe **zi**-rorek-a (ndi) zi-r-II **Agr Raising**  
10-cow 10SM-seem-PRS (that) 10SM-eat-PST  
‘The cows seem to have eaten.’ (Lit. *The cows seem that ate.*)
- b. zi-ŋombe **ga**-rorek-a (ndi) zi-r-II **Non-Agr Rais.**  
10-cow 6SM-seem-PRS (that) 10SM-eat-PST  
‘The cows seem to have eaten.’ (Lit. *The cows seem that ate.*)

In a pattern that has also been attested among other Bantu languages, raising is banned out of non-finite clauses, shown in (8), in stark contrast to the English pattern.

<sup>2</sup>The Movement Theory of Control (Boeckx et al., 2010) conflates some of these differences between raising and control, but these distinctions don’t alter the argumentation presented here.

<sup>3</sup>All Logoori data and syntactic judgments in this chapter are from Isaac Kilaha Thomas, a Logoori speaker who resides in Southern California.

(8) **Logoori**

\*zi-ŋombe zi/ga-rorek-a ku-ri-a  
10-cow 10SM/6SM-seem-PRS INF-eat-FV  
'The cows seem to eat.'

\* Raising from INF

Note that the raising verb agrees with the raised subject in (7a) (**agreeing raising**), but there is a distinct subject agreement form in (7b), which we refer to as **non-agreeing raising** or sometimes **ga-raising** for Logoori.

The core idea of the traditional account of raising constructions was that subjects that are unlicensed in embedded clauses (i.e. in non-finite complement clauses) must raise into the matrix clause to be licensed, and they are able to do so because 1) TPs are not phases, and 2) the matrix verb assigns no external theta role. Likewise, in non-raised constructions where an expletive is the main-clause subject, the embedded clause is finite, and there is no motivation for the embedded subject to raise into the main clause. The kind of traditional analysis mentioned above is clearly at odds with the apparent Logoori pattern (as well as in Tiriki and in other Bantu hyper-raising constructions), where raising is banned out of non-finite clauses (8), and possible but optional out of finite clauses (7).

### 1.3 The contribution of this paper

We refer to raising out of finite clauses as **hyper-raising** (following Ura 1998 and much subsequent work), identified as a construction that shows properties expected of syntactic movement, but in contexts traditionally thought to rule out movement. Furthermore, in these hyper-raising contexts, we see two distinct options for subject agreement on the raising verb (agreeing with the raised subject or taking class 6 *ga-* agreement), another aspect of Logoori raising that the traditional model offers no explanation for.

The Logoori patterns raise a number of theoretical and analytical questions that go beyond what we can address in this paper. Our goal is largely empirically-oriented, or what one might call empirical analysis: we want to demonstrate with a relative degree of certainty that these are in fact raising constructions (according to the traditional diagnostics) and that they do therefore pose the kinds of theoretical questions that we noted above. We have been calling the forms in (7) examples of hyper-raising, but this is not the only available analysis of their structure. (7a) could reasonably be analyzed as a copy-raising; Logoori is a null subject language, so the raising constructions could in fact be something more like *The cows seem like they ate*, where the embedded subject pronoun is simply null: this analysis is illustrated in (9a), contrasting with the hyper-raising analysis in (9b).

(9) Analytical options for (apparent) agreeing hyper-raising

a. zi-ŋombe<sub>k</sub> zi-rorek-a (ndi) *pro*<sub>k</sub> zi-r-II  
10-cow 10SM-seem-PRS (that) *pro* 10SM-eat-PST  
'The cows<sub>k</sub> seem like they<sub>k</sub> ate.'

**Copy-Raising Analysis**

b. zi-ŋombe<sub>k</sub> zi-rorek-a (ndi) zi-ŋombe<sub>k</sub> zi-r-II  
10-cow 10SM-seem-PRS (that) *pro* 10SM-eat-PST  
'The cows<sub>k</sub> seem that ate.'

**Hyper-Raising Analysis**

In a similar fashion the non-agreeing raising construction illustrated above in (7b) could instead be construed as an example of dislocation with an expletive subject (e.g. *the cows, it seems like pro ate*). These potential alternative analyses are schematized here:

(10) Analytical options for (apparent) non-agreeing hyper-raising

a. [ SUBJ<sub>k</sub> [ (**expl**) *ga*<sub>i</sub>-seems [CP that t<sub>k</sub> [TP ... ] ] ] ]  
b. [ SUBJ<sub>k</sub> *ga*<sub>i</sub>-seems [CP that t<sub>k</sub> [TP ... ] ] ]

**LD+Expl**

**Non-Agreeing Raising**

In §4 we show that the Logoori predicate *-roreka* 'seem' should be analyzed as hyper-raising in both its agreeing and non-agreeing forms. However, we introduce another raising predicate *-fwaana* in §5, which shows a contrast in raising properties between its agreeing and non-agreeing forms: a hyper-raising analysis is therefore unavailable for the non-agreeing (apparent) raising construction with *-fwaana*. This is an interesting result on multiple levels: it offers a language-internal contrast between non-agreeing raising and a topic + expletive construction, but the

presence of agreeing raising *without* non-agreeing raising itself proves theoretically problematic for Halpert’s (2018) proposals for explaining hyper-raising in Zulu (see §2 and §3).

The discussions of Tiriki in §6 again confirm the existence of agreeing and non-agreeing raising from another language, but the Tiriki patterns also add different kinds of complexity, offering some insights into the nature of the non-agreeing raising construction.

In §7 we outline Halpert’s (2016) analysis of Zulu hyper-raising (of both the agreeing and non-agreeing varieties), and we outline the ways in which the Luyia facts pose problems for this account. Given our largely empirical project here, however (and given the empirical complexity of arguing for the hyper-raising analysis in the first place), in this paper we do not attempt to propose a re-analysis, leaving that for future work. The main contributions of the paper, therefore, are to demonstrate that both Logoori and Tiriki have hyper-raising constructions of both the agreeing and non-agreeing varieties, showing typical properties of A-movement from embedded subject position to matrix subject position. We also make clear how this offers a first confirmation of key findings from Halpert (2016) regarding Zulu, while simultaneously showing enough differences to render the previous analysis difficult to directly apply to Luyia. Much more work will be necessary in the future to propose a solution.

## 2 Previous work on Bantu hyper-raising

Bantu languages contain robust inventories of noun classes, with all lexical nouns belonging to some noun class. An example of a typical noun class system is provided in (11) for Lubukusu, a Luyia language related to the ones we investigate here. Noun classes are glossed with cardinal numbers, with odd numbers typically being the singular and the immediately ascendant even number being the associated plural.

(11) Partial Chart of Lubukusu Noun Classes (Mutonyi, 2000, 6)

Class	Pre-Prefix	Prefix	Example	Gloss
1	o-	mu-	ómukhasi	‘woman’
2	ba-	ba-	babaana	‘children’
3	ku-	mu-	kúmukhono	‘arm/hand’
4	ki-	mi-	kímikhono	‘arms/hands’
5	li-	li-	lilyaanda	‘ember’
6	ka-	ma-	kamaanda	‘embers’
7	si-	si-	sisyaangu	‘sponge’
8	bi-	bi-	bibyaangu	‘sponges’
9	e-	N-	eendubi	‘basket’
10	chi-	N-	chiindubi	‘baskets’
11	lu-	lu-	lúlwiika	‘horn’
12 (Diminutive)	kha-	kha-	khákhaana	‘small child’
14	bu-	bu-	búbwiino	‘ink’
15	khu-	khu-	khukhwaanja	‘to begin’
16 (‘at’)	a-		amulyaango	‘at/near the door’
16a (‘towards’)	sy-		syamulyaango	‘towards the door’
17 (‘on’)	khu-		khumulyaango	‘on the door’
18 (‘in’)	mu-		mumulyaango	‘in the door’

Noun classes are also employed in a variety of derivational processes including nominals: there are classes for deverbals, augmentatives/diminutives, and locative phrases, among others.

Bantu languages also have robust agreement properties: it is extraordinarily common for functional elements in the clause to bear agreement in noun class with nominals. This includes nominal-internal elements like demonstratives, adjectives, and linker-type associative markers, but also includes clausal elements like tense and aspect morphology, complementizers, and even manner adverbials (Diercks, 2013; Carstens, 2005; Carstens and Diercks, 2013a; Kawasha, 2007; Carstens, 2001, among many others). In examples throughout this paper, nominals are glossed with a cardinal number indicating their noun class and elements that agree with those nominals are glossed with

the same cardinal number.<sup>4</sup>

It has been known for some time that in Bantu languages there are a variety of Case-theoretic anomalies, one of which is that embedded subjects can raise out of finite clauses (from presumably Case-licensed positions) to non-thematic matrix clause positions. [Harford Perez \(1985\)](#) demonstrates that passive-raising occurs in the Bantu languages Shona, Kikuyu, and Kirundi:

- (12) a. [<sub>IP</sub> *pro*<sub>EXPL</sub> Zví-no-fungir-wa [<sub>CP</sub> kuti [<sub>IP</sub> mbavhá y-aka-vánd-á mú-bako ]]]. **Shona**  
           8<sub>EXPL</sub> 8<sub>SM-PRS-suspect-PASS</sub> that 9<sub>thief</sub> 9<sub>SM-FAR.PST-hide-FV</sub> 18-cave  
           ‘It is suspected that the thief is hidden in the cave.’  
 b. [<sub>IP</sub> Mbavháí i-no-fungir-wa [<sub>CP</sub> kuti [<sub>IP</sub> *t*<sub>i</sub> y-aka-vánd-á mú-bako ]]].  
           9<sub>thief</sub> 9<sub>SM-PRS-suspect-PASS</sub> that 9<sub>SM-FAR.PST-hide-FV</sub> 18-cave  
           ‘The thief is suspected to be hidden in the cave.’  
           Lit. ‘The thief is suspected that is hidden in the cave.’ ([Harford Perez, 1985](#))
- (13) a. I-nzovu<sub>k</sub> z-aa-menyeeke-ye kó t<sub>k</sub> z-iish-e báa-ba-antu **Shona**  
           pp-10elephants 10-PST-be.known-PFV that 10-kill-PFV 2those-2-people  
           ‘Elephants are renowned for having killed those people.’  
 b. Mũ-ndũ-mũ-rũmék ũ-yũ ní óókáíne átĩ nĩ t<sub>k</sub> óórág-íre mú-ndũ.  
           1-person-1-man this-1 FOC 1.has.been.known that FOC 1kill-PST 1-person  
           ‘This man is known to have killed a person.’ ([Harford Perez, 1985](#))

[Carstens and Diercks \(2013b\)](#) show that the Luyia languages Lubukusu and Lusaamia both have hyper-raising with *seems*-type predicates. They specifically show that these languages display tense/aspect distinctions in the lower clause of such constructions, which is relevant given the emphasis in other work of the ‘defective’ nature of clauses where hyper-raising occurs.

- (14) a. Efula e-lolekhana e-kw-ile (FP = Far past) **Lubukusu**  
           9rain 9S-seems 9S-rain-FP  
           ‘It seems to have rained.’ (lit: ‘Rain seems that fell.’)  
 b. Efula e-lolekhana y-a-kw-ile (RP = Recent past) **Lubukusu**  
           9rain 9S-seems 9S-RP-fall-PST  
           ‘It seems to have rained.’ (lit: ‘Rain seems that fell.’)  
 c. Efula yi-bonekhana i-na-kwa muchiri (FUT = Future) **Lusaamia**  
           9rain 9S-seem 9S-FUT-fall tomorrow  
           ‘It seems that it will rain tomorrow’ (lit: rain seems will fall tomorrow) ([Carstens and Diercks, 2013b](#), (5),(6))

In addition to the raising out of subjunctive complements noted by [Zeller \(2006\)](#), [Halpert \(2016, 2018\)](#) shows that Zulu allows raising out of finite indicative complement clauses, as shown in (15b), while disallowing raising out of non-finite complement clauses (15c):

- (15) a. ku-bonakala [ukuthi **uZinhle** u-zo-xova ujeqe ]  
           17s-seem that AUG.1Zinhle 1S-FUT-make AUG.1steam.bread  
 b. **uZinhle**<sub>i</sub> u-bonakala [ukuthi *t*<sub>i</sub> u-zo-xova ujeqe ]  
           AUG.1Zinhle<sub>i</sub> 1s-seem that *t*<sub>i</sub> 1S-FUT-make AUG.1steam.bread  
 c. \***uZinhle**<sub>i</sub> u-bonakala [*t*<sub>i</sub> **uku**-(zo)-xova ujeqe ]  
           AUG.1Zinhle<sub>i</sub> 1s-seem *t*<sub>i</sub> INF-(FUT-)make AUG.1steam.bread  
           ‘It seems that Zinhle will make steamed bread.’ ([Halpert, 2016, 1](#))

Note that in Zulu there is also another variant of the hyper-raising-to-subject construction, wherein the subject marker on the main clause predicate bears distinct agreement feature from the raised subject, as shown by [Halpert \(2016\)](#):

<sup>4</sup>First-/Second-person nominals are glossed with the cardinal number paired with a number marking: 1SG = first singular.

- (16) uZinhle<sub>i</sub> ku- bonakala [ukuthi t<sub>i</sub> u- zo- xova ujeqe] [Zulu]  
 AUG.1Zinhle<sub>i</sub> 17s- seems that t<sub>i</sub> 1s- FUT- make AUG.1steamed.bread  
 ‘It seems that Zinhle will make steamed bread.’ (Halpert, 2015)

These **non-agreeing hyper-raising** constructions will take up a large amount of the empirical and theoretical discussion in this paper. Halpert (2018) argues that these constructions are central to understanding the mechanisms behind hyper-raising; one of the conclusions from this paper is that Logoori and Tiriki clearly replicate Halpert’s finding of the existence of non-agreeing hyper-raising. Nonetheless, we will show that Halpert’s analysis cannot be straightforwardly applied to the Luyia facts.

Similar hyper-raising constructions have been encountered for Xhosa (Vicki Carstens, pc), Swahili and Digo (Diercks, 2012), Shona (see below, also Harford Perez 1985), Kikuyu and Kirundi (Harford Perez, 1985; Ura, 1994), Lubukusu (Justine Sikuku and Aggrey Wasike, pc), and Wanga (Diercks field notes). To our knowledge, among Bantu languages, only Matengo and Makhuwa have been documented specifically to *lack* hyper-raising (van der Wal, 2015). It is our suspicion that both agreeing and non-agreeing hyper-raising occur broadly across Bantu languages, though the extent is yet to be fully documented.<sup>5</sup>

As noted in the introduction, hyper-raising constructions pose significant challenges to a number of core theoretical constructs within mainstream generative grammar, including its current iteration (the Minimalist Program). Our main concern in this work, however, is not to provide a new theoretical analysis, but instead to demonstrate that Logoori and Tiriki in fact have hyper-raising constructions, and that they are not amenable to some other alternative empirical analysis (e.g. copy-raising or topicalization). This task is itself relatively extensive, and is prerequisite to additional theorizing. This paper provides the first thorough documentation of non-agreeing hyper-raising constructions outside of Zulu, but we show that the patterns in both Logoori and Tiriki are non-identical to Zulu, in fact challenging Halpert’s (2016; 2018) analysis.

### 3 Diagnosing hyper-raising

In this section we outline a range of the relevant diagnostics that have been employed to understand raising constructions, laying the groundwork for the discussion of Luyia languages in the sections that follow.

#### 3.1 Connectivity effects with idioms in hyper-raising

It has long been noted that raising predicates like *seem* in (17a) retain the idiomatic readings of whole-clause idioms whose subject is raised to subject position, whereas non-raising predicates like *hope* do not retain idiomatic readings, as shown in (17b).

- (17) a. The cat seems [ ~~the cat~~ to be out of the bag ] = the secret seems to have been revealed  
 b. The cat hopes [ PRO to be out of the bag ] ≠ the secret ought to be revealed

The assumption is that in order to retain their idiomatic interpretation, idioms must (at some point in the derivation) be merged into the structure as a unit. Therefore, (17a) is generated via movement of *the cat* from the lower clause to the main clause, whereas *the cat* is base-generated in the main clause in (17b), serving as an argument of the matrix verb *hopes*.<sup>6</sup>

Halpert (2016) shows that Zulu hyper-raising retains idiomatic interpretations of full-clause idioms.

<sup>5</sup>Outside of Bantu languages, hyper-raising (either to matrix subject position or object position) has been documented in a range of languages: Chinese, Arabic, Persian, Telugu (Dravidian), Bhojupri (Indo-Aryan), Dholuo (Nilotic), and Uzbek (Turkic) (Ura, 1994), Maltese (Camilleri, 2018), Brazilian Portuguese (Ferreira, 2009; Martins and Nunes, 2005, 2010; Nunes, 2008; Boeckx et al., 2010), Mongolian (Fong, 2018, 2019), Janitzio P’urhepecha (Zyman, 2017), Nez Perce (Deal, 2017), and Japanese (Ura, 1994; Tanaka, 2002), though this list is surely not exhaustive.

<sup>6</sup>The Movement Theory of Control offers a different perspective on deriving control constructions, wherein both raising and control involve movement, with the distinction in empirical effects arising from the different thematic properties of the matrix predicate; see Boeckx et al. (2010) for an overview. The analytical questions arising from these distinctions are relevant to these constructions, but are distinct from our main concerns in this paper.

- (18) a. ku-bonakala [ukuthi **iqhina**            **li**-zo-phuma embizeni]  
           17SM-seem that    AUG.5steinbok 1SM-FUT-exit LOC.3cooking.pot
- b. **iqhina**<sub>i</sub>            **li**-bonakala [ukuthi t<sub>i</sub> **li**-zo-phuma embizeni]  
           AUG.5steinbok<sub>t<sub>i</sub></sub> 5SM-seem that    t<sub>i</sub> 5SM-FUT-exit LOC.3cooking.pot  
           ‘It seems that the secret will come out.’  
           (literal: ‘It seems that the steinbok will leave the cooking pot.’)

We see in these Zulu examples that the idiomatic reading is retained with the matrix verb *-bonakala*, in clear contrast to control and copy-raising constructions, where idiomatic readings are lost in Zulu. We illustrate with a control construction here:

- (19) #**iqhina**<sub>k</sub>            **li**-thanda [ukuthi t<sub>k</sub> **li**-phum-e    embizeni]  
           AUG.5steinboki 5SM-like that            5SM-exit-SUBJ LOC.3cooking.pot  
           ‘The steinbok likes to come out of the cooking pot.’  
           \*‘The secret likes to come out.’ (Halpert, 2018, (20a))

These patterns are identical to the familiar (English) contrast between idiomatic readings in raising and control, with the only (and important) difference being that the embedded clause in Zulu hyper-raising is a finite CP.

### 3.2 Hyper-Raising is not copy-raising

A major question that arises in the analysis of raising constructions in Bantu languages (and in many other languages with constructions that appear to be hyper-raising) is whether they are in fact raising constructions in the sense of (20a) where the putatively raised argument has undergone syntactic movement from the embedded clause to the main clause, or if instead the construction in question is in fact a copy-raising construction like the English example in (20b).

- |  |                     |
|--|---------------------|
| (20) a. Tania seems <del>Tania</del> to be sick. | <b>True Raising</b> |
| b. Tania seems like she is sick.                 | <b>Copy-Raising</b> |

Since Bantu languages are null-subject languages, an apparent Bantu raising construction could in fact be something more like (44b) but with a null pronoun in the embedded clause, and where there is no direct syntactic link between the embedded subject position and the main clause subject aside from coreference. Under most analyses the subjects in copy-raising constructions do not undergo syntactic movement, but instead are base-generated in the main clause (Potsdam and Runner, 2001).

These distinct analyses make distinct predictions: idiomatic readings should be retained in hyper-raising but should be retained to a lesser extent in copy-raising. Similarly, the matrix subject in copy-raising is an argument of the perception predicate, and as Rogers (1972) and Potsdam and Runner (2001) have shown, copy-raising requires a reading where the matrix subject is the perceptual source of the observation being made, whereas this is not the case for (hyper-)raising.

- (21) *Scenario: I look in the refrigerator only to find that it is empty.*
- a. It seems like somebody has eaten all the food!
- b. Somebody seems to have eaten all the food!
- c. #Somebody seems like they has eaten all the food! (adapted from Carstens and Diercks, 2013b, (8))

Therefore, while a hyper-raising construction can be used to describe a scenario, without necessarily directly describing the matrix subject itself, this is not the case for copy-raising. In (21c) we can only get a licit interpretation if the speaker is directly observing the “somebody” they are (indirectly) referring to, it is unacceptable looking at an empty refrigerator. As Carstens and Diercks (2013b) show for Lusaamia and Lubukusu, these perceptual source readings can serve to differentiate copy-raising and hyper-raising in many instances.

Copy-raising constructions often show distinctions with idiomatic readings as well, as demonstrated by Halpert (2016, 2018) for Zulu:

- (22) a. **iqhina<sub>i</sub>**        **li-bonakala** [ukuthi t<sub>i</sub> **li-zo-phuma** embizeni]  
 AUG.5steinbok<sub>t<sub>i</sub></sub> 5SM-seem that t<sub>i</sub> 5SM-FUT-exit LOC.3cooking.pot  
 ‘It seems that the secret will come out.’  
 (literal: ‘It seems that the steinbok will leave the cooking pot.’)
- b. # **iqhina** **li-zwa-akala** [(ukuthi) **li-phum-e** embizeni]  
 5steinbok 5SM-perceive-able that 5SM-exit-PFV LOC.9pot  
 ‘The steinbok sounds like it came out of the cooking pot.’  
 \*‘The secret sounds like it came out.’ (Halpert, 2016, 38)

We can see the same disinction arising in the Zezuru variety of Shona.<sup>7</sup> Shona has hyper-raising constructions using the verb *-nenge* ‘seem.’ As (23b) shows, in a raising context in Shona a complementizer is impossible.<sup>8</sup>

- (23) a. **Zvi-nenge** (kuti) **Tendai a-no-far-a**. **Shona**  
 8SA-seems (that) 1Tendai 1SM-PRS-be.happy-FV  
 ‘It seems that Tendai is happy.’
- b. **Tendai a-nenge** (\*kuti) **a-no-far-a**  
 1Tendai 1SM-seems 1SA-PRS-be.happy-FV  
 ‘Tendai seems to be happy.’

Similar to Zulu, Shona also has a whole-clause idiom that can be used to diagnose a hyper-raising construction. The relevant idiom is in (24).

- (24) **Chi-dembo ch-a-vii-w-a** **Shona**  
 7-skunk 7SM-PRF-skin-PASS-FV  
 ‘The skunk has been skinned.’  
 = ‘The secret has been exposed.’

As can be seen below, the copy-raising construction in Shona (using the verb *-ita* ‘show’) has a surface appearance like hyper-raising, but the idiomatic reading is lost. So (25b) can only mean that a literal skunk has been skinned, and not that a secret has been revealed.

- (25) a. **Zvi-no-ita** kunge **chi-dembo ch-a-vii-wa**. **Shona**  
 8SM-PRS-look like 7-skunk 7SM-PRF-skin-PASS  
 ‘It looks like the secret is out (but there is uncertainty).’  
 Lit. ‘It looks like the skunk has been skinned.’
- b. **Chi-dembo chi-no-ita** kunge **ch-a-vii-w-a**. **Shona**  
 7-skunk 7SM-PRS-look like 7SM-seems 7SM-PRF-skin-PASS-FV  
 ‘The skunk looks like it’s been skinned.’  
 ≠ The secret looks like it’s been exposed.

In contrast, the hyper-raising construction we saw previously straightforwardly retains the idiomatic reading, a clear contrast and evidence of syntactic movement in Shona hyper-raising.

- (26) a. **Zvi-nenge** kuti **chi-dembo ch-a-vii-w-a** **Shona**  
 8SM-seems that 7-skunk 7SM-PRF-skin-PASS-FV  
 ‘It seems that the secret has been exposed.’ Lit. ‘it seems that the skunk has been skinned.’
- b. **Chi-dembo chi-nenge** **ch-a-vii-w-a**  
 7-skunk 7SM-seems 7SM-PRF-skin-PASS-FV  
 ‘The skunk seems to have been skinned.’  
 = ‘the secret seems to have been exposed.’

<sup>7</sup>Our thanks for Tafadzwa Mtisi for his judgments on these patterns.

<sup>8</sup>As we will see below, Carstens and Diercks 2013b document this same pattern in Lusaamia.



Likewise, the reconstructed readings diagnostic shows that same distinction between hyper-raising with *-nenge* and copy-raising with *-ita*. In the context given in (27), a raising construction with *-nenge* is natural.

(27) *Scenario: you're walking down a path, and you come across your friend Tendai's bike broken and bent up on the ground. Maybe you see Tendai's shoe sitting there, and his school books scattered on the ground, but Tendai is nowhere to be seen.*

- a. Zvi-nenge kuti Tendai a-donh-a. **Shona**  
 8SM-seems that 1Tendai 1SM.PST-fall-FV  
 'It seems that Tendai fell.'
- b. Tendai a-nenge a-donh-a.  
 1Tendai 1SM-seems 1SM.PST-fall-FV  
 'Tendai seems to have fallen.' (Lit. *Tendai seems (that) fell*)

In the same context, however, apparent raising with the copy-raising predicate *-ita* is unacceptable, again suggesting that *-nenge* and *-ita* are only surface-similar, requiring distinct structures.

- (28) a. Zvi-no-ita kunge Tendai a-donha. **Shona**  
 8SM-PRS-appear like 1Tendai 1SM.PST-fall  
 'It looks like Tendai fell.'
- b. #Tendai a-no-ita kunge a-donha.  
 1Tendai 1SM-PRS-appear like 1SM.PST-fall  
 'Tendai looks like he fell.'
- Unacceptable in given context: must be observing Tendai to be licit.

This is expected if the matrix subject in copy-raising in fact never moves out of the embedded clause, and is instead base-generated in the matrix clause as a thematic argument of the matrix perception verb.

To summarize: null subject languages offer a complicating factor in analyzing potential hyper-raising constructions, as a copy-raising analysis (with a null coreferent pronoun in the embedded clause) must be ruled out for any given construction. But the evidence shown here demonstrates that there are reliable ways to distinguish between copy-raising and hyper-raising (e.g. idioms, perceptual source readings). Therefore these diagnostics will play a part in identifying hyper-raising constructions for the Luyia languages discussed in this paper.

### 3.3 Diagnosing non-agreeing hyper-raising

A major empirical finding from Halpert (2012, 2016, 2018) is that in addition to non-raising and (agreeing) hyper-raising, there is a second form of raising in Zulu in which the matrix verb bears a class 17 subject marker that does not agree with the raised subject:

- (29) **uZinhle<sub>i</sub>** **ku**-bonakala [ukuthi *t<sub>i</sub>* **u**-zo-xova ujeqe]  
 AUG.1Zinhle<sub>i</sub> 17S-seem that *t<sub>i</sub>* 1S-FUT-make AUG.1steamed.bread  
 'It seems that Zinhle will make steamed bread.' (Halpert, 2016, 13)

A similar pattern has also been observed in Luyia languages related to Logoori and Tiriki, as illustrated in Lubukusu and Wanga examples in (30a).

- (30) a. Alfredi **[ka]**-lolekhana mbo a-lwala **[Lubukusu]**  
 1Alfred 6SM-seems that 1SM-is.sick  
 'Alfred seems like he is sick.' (field notes)
- b. Makokha **[ka]**-lolekhana [<sub>CP</sub> mbu Makokha ya-funache im-bako]. **[Wanga]**  
 Makokha 6SM-appear that 1SM-broke 9-djembe  
 'It appears that Makokha broke the djembe.' (field notes)

The lack of agreement between the subject marker and the raised subject is relatively exceptional within Bantu languages, as Halpert points out. As discussed by Collins (2004), Carstens (2005), and Baker (2008) (among

many others), agreement in Bantu languages is usually linked with movement to the specifier of the agreeing head. Here, however, we see agreement on the matrix subject marker that does not match the raised subject in features (and the trigger of the non-agreeing subject marker is not immediately apparent).

As explored by Halpert (2015, 2016), a major question about constructions like this is whether they are instances of an expletive construction with a left-dislocated topic masquerading as the (apparent) raised subject as in (31a), or whether they are true hyper-raising constructions that (for some reason) have an alternative subject agreement form, as in (31b).

- (31) a.  $[_{CP} \text{SUBJ}_k [_{TP} (\text{expl}_i) \text{sm}_i\text{-seems} [_{CP} \text{that } t_k [_{TP} \dots ] ] ] ]$  **LD + Expl**  
 b.  $[_{TP} \text{SUBJ}_k \text{sm}_i\text{-seems} [_{CP} \text{that } t_k [_{TP} \dots ] ] ]$  **Non-Agreeing Raising**

Halpert (2016, 2018) shows convincingly that, in Zulu constructions like (29), the subject behaves like a canonical subject (aside from the subject agreement) and does *not* have the properties of a left-dislocated phrase, concluding that an analysis like (31b) is most appropriate.

- (32) Diagnostics for non-agreeing hyper-raising in Zulu (Halpert, 2018, Table 2)

DIAGNOSTIC	TOPIC-FRONTING BEHAVIOR	HYPER-RAISING BEHAVIOR
Agreement	✓ <b>No matrix agreement</b>	✗ Matrix agreement
Interpretation	✗ Topic interpretation necessary	✓ <b>Compatible with new information, broad focus, subject idioms</b>
Prosody	✗ Topics require prosodic boundary	✓ <b>No prosodic boundary after subject</b>
Multiple raising predicates	✗ Intermediate expletive agreement requires matrix expletive	✓ <b>Intermediate expletive agreement compatible with full matrix agreement</b>
Object relatives	✗ Fronted topic cannot intervene between head and relative clause	✓ <b>Raised subject can intervene between head and relative clause</b>
Topic-fronting variation	✗ Topic fronting from embedded indicatives ungrammatical in Durban B	✓ <b>Raising out of embedded indicatives grammatical for Durban B speakers</b>

Halpert therefore analyzes the construction in (29) as an instance of hyper-raising, but it is non-agreeing hyper-raising in the sense that the matrix predicate does not agree with the raised subject. Halpert interprets these constructions as central to understanding the nature of hyper-raising, revealing the underlying process that facilitates hyper-raising. In brief, Halpert’s claim is that the class 17 agreement in non-agreeing raising is evidence of matrix T agreeing with the embedded CP, and it is this agreement relationship that essentially unlocks the embedded CP for hyper-raising of the embedded subject.

We will briefly exemplify the diagnostics listed in the chart above, as our own argumentation regarding Luyia is heavily shaped by these diagnostics. In each subsection below a diagnostic is outlined that Halpert argues distinguishes canonical subjects from unambiguously left-dislocated subjects in Zulu, and then the diagnostic is applied to examine whether non-agreeing raising includes a left-dislocated subject (or not). In all instances, as the chart above outlines, subjects of non-agreeing raising constructions behave as if they are *not* left-dislocated.

### 3.3.1 Information structure of raised subjects vs. LD topics

First, Halpert (2016, 236ff) shows that unambiguously left-dislocated phrases are necessarily discourse-old. In an out-of-the-blue context like that invoked by the question in (33), a preverbal subject of a raising verb is natural as (34a) shows for *-fanele* and (34b) shows for *-bonakala*. In contrast, a left-dislocated object is infelicitous in an out-of-the-blue context, as (34c) shows.

(33) kw-enzeka-ni?  
 17SM-happen-9what  
 ‘What’s happening?’

(34) Answers to (33):

- a. uZinhle u-fanele ukuthi a-xov-e ujeqe manje  
 AUG.1Zinhle 1SM-be.necessary that 1SM-make-SUBJ aug.1steamed.bread now  
 ‘Zinhle must make steamed bread now.’
- b. uZinhle u-bonakala ukuthi u-xova ujeqe manje  
 AUG.1Zinhle 1SM-seem that 1SM-make AUG.1steamed.bread now  
 ‘Zinhle seems to be making steamed bread now.’
- c. #uZinhle ngi-cabanga ukuthi u-xova ujeqe manje  
 AUG.1Zinhle 1SG.SM-think that 1SM-make AUG.1steamed.bread now  
 ‘(As for) Zinhle, I think that she’s making steamed bread now.’

The critical observation for Halpert’s (and our) purposes is that non-agreeing raising constructions can readily be used to answer out-of-the-blue questions.

(35) Q: kw-enzeka-ni?  
 17SM-happen-9what  
 ‘What’s happening?’

- A1: uZinhle ku-fanele ukuthi a-xov-e ujeqe manje  
 AUG.1Zinhle 17SM-be.necessary that 1SM-make-SUBJ AUG.1steamed.bread now  
 ‘Zinhle must make steamed bread now.’
- A2: uZinhle ku-bonakala ukuthi u-xova ujeqe manje  
 AUG.1Zinhle 17SM-seem that 1SM-make AUG.1steamed.bread now  
 ‘Zinhle seems to be making steamed bread now.’

Given that left-dislocated phrases cannot occur in those contexts (34c), the examples in (35) are evidence that preverbal raised subjects in non-agreeing raising are in fact canonical subjects and are not left-dislocated. As we will see in what follows, this finding is consistent across a variety of diagnostics, providing evidence that these Zulu constructions are in fact raising-to-subject constructions and are not instances of left dislocation in combination with a null (class 17) expletive subject.

### 3.3.2 Idiomatic readings: raised subjects vs. left-dislocated topics

Another relevant distinction is that preverbal subjects may be part of idiomatic expressions while dislocated phrases cannot. Recall the Zulu idiom referenced above in (18) the subject of the idiom cannot be left-dislocated (and retain its idiomatic interpretation) in (19), but it readily participates in A-movement in the raising construction in (18) while still carrying its idiomatic meaning. Coming back to non-agreeing raising, the example in (36) show that non-agreeing raising retains the figurative reading of the idiom, which patterns with the raising construction in (18) and distinctly from the dislocation construction in (19).

(36) iqhina ku-bonakala ukuthi li-phuma embizeni  
 AUG.5steinbok 17SM-seem that 5SM-exit LOC.9cooking.pot  
 ‘The secret seems to be coming out.’

Again, this is evidence that non-agreeing raising in Zulu has the properties of (hyper-)raising and not of a topicalization/dislocation construction.

### 3.3.3 A-movement: raising can feed raising

It has been widely demonstrated that A’-moved elements are frozen once they have reached their scopal position, and it is also widely assumed that A’-movement cannot generally feed A-movement; this is the ban on so-called

‘improper movement’ (Pesetsky, 2013; Obata and Epstein, 2011; Richards, 2014) though hyper-raising constructions directly challenge this theoretical assumption on many analyses (Obata and Epstein, 2011; Fong, 2019). Given the prevalence of freezing effects, however, this diagnostic is still useful here. In this case, then, embedding a non-agreeing raising construction inside an agreeing raising construction offers evidence that non-agreeing raising is itself A-movement, as it can feed a later A-movement.

(37) Multiple raising: ku- on intermediate predicate

- a. uThemba<sub>i</sub> u-bonakala ukuthi t<sub>i</sub> u- fanele ukuthi t<sub>i</sub> a-y-e esikoleni manje  
 AUG.1Themba 1SM-seem that 1SM-be.necessary that 1SM-go-SUBJ LOC.7school now  
 ‘Themba seems to have to go to school now.’
- b. uThemba<sub>i</sub> u-bonakala ukuthi t<sub>i</sub> ku- fanele ukuthi t<sub>i</sub> a-y-e esikoleni manje  
 AUG.1Themba 1SM-seem that 17SM-be.necessary that 1SM-go-SUBJ LOC.7school now  
 ‘Themba seems to have to go to school now.’ (Halpert, 2016, 238ff)

The emerging pattern is, of course, unambiguous; non-agreeing raising behaves as if it were a raising construction and *unlike* a dislocation construction.

### 3.3.4 Subjects and topics inside relative clauses

An additional diagnostic invoked by Halpert for topicalized phrases comes from relative clauses: left-dislocation is impossible inside an object relative clause (39c), but preverbal subjects are acceptable (38).

(38) Object relative: subject can intervene between head and verb

- [indoda uZama a-yi-bon-ile] i-gqoka isikipa esibomvu  
 AUG.9man AUG.1Zama REL.1SM-9OM-see-PFV 9SM-wear AUG.7tshirt REL.7-red  
 ‘The man who Zama saw is wearing a red T-shirt.’ (Halpert, 2016, 241)

(39) Object relative: topic cannot intervene between head and verb

- a. uMpho ngi-cabanga ukuthi u-zo-yi-thenga inyama  
 AUG.1Mpho 1SG.SM-think that 1SM-FUT-9OM-buy AUG.9meat  
 ‘(As for) Mpho, I think that she will buy the meat.’
- b. [inyama engi-cabanga ukuthi uMpho u-zo-yi-thenga] i-zo-biza imali enkulu  
 AUG.9meat REL.1SG.SM-think that AUG.1Mpho 1SM-FUT-9OM-buy 9SM-FUT-cost AUG.9money REL.9big  
 ‘The meat that I think Mpho will buy will be expensive.’
- c. \*[inyama uMpho engi-cabanga ukuthi u-zo-yi-thenga] i-zo-biza  
 AUG.9meat AUG.1Mpho REL.1SG.SM-think that 1SM-FUT-9OM-buy 9SM-FUT-cost AUG.9money REL.9big  
 imali enkulu (Halpert, 2016, 241)

Applying this distinction to raising constructions, we see no distinction between agreeing raising and non-agreeing raising: both are acceptable inside object relative clauses.

(40) Object relative: non-agreeing fronted subject can intervene between head and verb

- a. inyama uMpho a-fanele a-yi-phek-e i-si-thengiwe  
 AUG.9meat AUG.1Mpho REL.1SM-must 1SM-9OM-cook-SUBJ 9SM-now-bought  
 ‘The meat that Mpho must cook has now been bought.’
- b. inyama uMpho e-ku-fanele a-yi-phek-e i-si-thengiwe  
 AUG.9meat AUG.1Mpho REL-17SM-must 1SM-9OM-cook-SUBJ 9SM-now-bought  
 ‘The meat that Mpho must cook has now been bought.’ (Halpert, 2016, 242)

If non-agreeing raising constructions in Zulu were left dislocation constructions, we would expect (40b) to be unacceptable in the same way that (39c) is. The fact that it instead patterns with the non-dislocation constructions argues against a dislocation analysis of non-agreeing raising.

### 3.4 Intermediate summary and predictions

In the sections that follow, some additional properties distinguishing hyper-raising from alternative analyses will be introduced for the Luyia varieties under consideration in this paper, but what we have seen above is sufficient to demonstrate that for Zulu: 1) hyper-raising exists, and 2) non-agreeing hyper-raising also exists. Again, based on the surface patterns alone, both constructions could reasonably be analyzed in different ways: hyper-raising could plausibly be copy-raising (with a null embedded subject), and non-agreeing raising could reasonably be analyzed as a matrix expletive construction with left-dislocation of the embedded subject. As Halpert (2016, 2018) makes clear, however (and as summarized in the chart in (32) above), these plausible alternative analyses don't hold up. There are clear connectivity effects with the lower clause that argue for raising to matrix subject position, and in non-agreeing raising the raised subject patterns with canonical Zulu subjects and *not* with left-dislocated phrases.

In what follows, we demonstrate that Luyia raising shares all of these properties with Zulu. This offers important empirical confirmation of Halpert's findings for Zulu, especially demonstrating the existence of non-agreeing raising in additional languages (which, to our knowledge, has only been documented for Zulu thus far). But the Luyia facts enrich our knowledge in multiple ways: specifically, we will show that some apparent non-agreeing raising constructions in fact are not such in Logoori, and we will show that Tiriki contains multiple distinct non-agreeing raising constructions. As we discuss in §7, despite the relative similarities between Luyia and Zulu, Halpert's (2016; 2018) analysis for Zulu cannot be extended to the Luyia patterns. In this paper we do not attempt an alternative analysis (simply demonstrating the empirical patterns is a sufficiently weighty task as is), but it does raise many empirical questions for Luyia moving forward, and it continues to pose important theoretical questions around hyper-raising in general.

A raising analysis of these constructions in Luyia makes a broad range of predictions: hyper-raised subjects ought to display connectivity effects with the embedded clause, they ought to behave like they have undergone A-movement, and they ought to behave like subjects as opposed to dislocated phrases. These predictions are laid out below and discussed in depth in the sections that follow.

- (41) Predictions of a hyper-raising analysis of (non-)agreeing raising
- Connectivity Effects
    - Retention of idiomatic readings in raising
    - Availability of reconstructed readings in raising
  - A-movement (not A'-movement)
    - Raised subjects can generate new binding possibilities in their matrix position
    - Raising can feed A'-extraction, but A'-movement cannot feed raising (\*improper movement)
  - Subject properties, not properties of LD phrases
    - Extraction of raised subjects shows subject properties, not non-subject properties
    - Raised subjects can occur inside relative clauses (LD elements cannot)
    - Raised subjects can be new information (LD elements cannot)

## 4 *-roreka* as a raising predicate in Logoori

In this section, we show that a hyper-raising analysis is preferable over a copy-raising or left-dislocation analysis (in the case of non-agreeing raising) for the Logoori verb *-roreka* 'seem.' Recall from the introduction that Logoori has (what appears to be) both agreeing raising and non-agreeing raising: non-agreeing raising shows invariant class 6 agreement on the matrix verb.

- (42) **Logoori**
- |                               |        |          |              |                 |
|-------------------------------|--------|----------|--------------|-----------------|
| ga-rorek-a                    | (ndi)  | zi-ŋombe | zi-r-ŋ       | <b>Unraised</b> |
| 6SM-seem-PRS                  | (that) | 10-cow   | 10SM-eat-PST |                 |
| 'It seems that the cows ate.' |        |          |              |                 |

(43) **Logoori**

- a. zi-ŋombe **zi**-rorek-a (ndi) zi-r-II **Agr Raising**  
 10-cow 10SM-seem-PRS (that) 10SM-eat-PST  
 ‘The cows seem to have eaten.’ (Lit. *The cows seem that ate.*)
- b. zi-ŋombe **ga**-rorek-a (ndi) zi-r-II **Non-Agr Rais.**  
 10-cow 6SM-seem-PRS (that) 10SM-eat-PST  
 ‘The cows seem to have eaten.’ (Lit. *The cows seem that ate.*)

As mentioned above, because Luyia languages are null subject languages, the agreeing raising construction in (43a) could reasonably be analyzed as a copy-raising construction like (44b), but with a null embedded subject.

- (44) a. Tania seems Tania to be sick. **True Raising**  
 b. Tania seems like she is sick. **Copy-Raising**

Likewise, the non-agreeing raising construction in (43b) could reasonably be analyzed as a matrix expletive construction with left-dislocation of the embedded subject, as schematized in (45a).

- (45) a. [ SUBJ<sub>k</sub> [ (**expl**<sub>i</sub>) **ga**<sub>i</sub>-seems [CP that t<sub>k</sub> [TP ... ] ] ] ] **LD+Expl**  
 b. [ SUBJ<sub>k</sub> **ga**<sub>i</sub>-seems [CP that t<sub>k</sub> [TP ... ] ] ] **Non-Agreeing Raising**

Following the same range of diagnostics established by Halpert’s work on Zulu, we will show that neither the expletive/dislocation analyses nor the copy-raising analysis can explain the properties of Luyia raising.

## 4.1 Connectivity effects show Logoori raising is hyper-raising

A hyper-raising analysis predicts that there will be clear connectivity effects between the main clause subject argument and the embedded clause subject argument.

### 4.1.1 *-roreka* retains idiomatic readings

We use the Logoori idiom given in (46) to diagnose raising contexts:<sup>9</sup>

- (46) mu-doga gu-simuk-i **Idiom**  
 3-car 3SM-depart-PST  
 ‘The car left.’  
 Idiomatic interpretation: ‘It’s too late’ (similar to English ‘the ship has sailed.’)
- (47) ga-rorek-aa ndi mu-doga gu-simuk-i **Unraised Form with Idiom**  
 6SM-seem-PRS that 3-car 3SM-depart-PST  
 ‘It seems that the car departed.’  
 ‘It seems that it is too late.’

When the subject of the embedded idiom is raised, the idiomatic reading is retained for both agreeing (48a) and non-agreeing (48b) constructions. This should only happen if the subject *mudoga* enters the structure in the embedded clause.

- (48) a. mu-doga gu-roreka (ndi) ~~mu-doga~~ gu-simuk-i **Agreeing Raising with Idiom**  
 3-car 3SM-seems (that) 3SM-depart-PST  
 ‘The car seems to have departed.’  
 ‘It appears to be too late.’ *Idiomatic Meaning Retained*

<sup>9</sup>We have identified two other subject-involved idioms in Logoori, but both use class 6 subjects, making it impossible to distinguish between agreeing and non-agreeing raising. *Magaanda gakuuunduka* literally means ‘the beans spilled’ and has the idiomatic meaning ‘the word is out’. *Maaze gakuuunduka* means ‘the water spilled’, with the idiomatic reading ‘there is nothing you can do about it’.

- b. mu-doga ga-roreka (ndi) ~~mu-doga~~ gu-simuk-i  
 3-car 6SM-seems (that) 3SM-depart-PST  
 ‘The car seems to have departed.’  
 ‘It appears to be too late.’

**Non-Agreeing Raising with Idiom**

*Idiomatic Meaning Retained*

Notably, the subject of an embedded sentential idiom cannot be left-dislocated and retain the idiomatic interpretation, as is evident in (49b):

- (49) a. suuvir-a ndi mu-doga gw-aku-simuk-a  
 1sgsm.believe that 3-car 3SM-PST-depart-FV  
 ‘I believe that the car has left.’  
 ‘I believe that it is too late.’

**Embedded Idiom**

- b. mu-doga, suuvira ndi gw-aku-simuk-a  
 3-car 1sgsm.believe that 3SM-PST-depart-FV  
 ‘The car, I believe that it has left.’  
 ‘\*I believe that it is too late.’

**\*Left-dislocation with Idiom**

*Idiomatic Meaning Unavailable*

The contrast between (49b) and (48b) give us our first piece of evidence suggesting that *ga*-raising patterns with other raising constructions and not with left-dislocated constructions. This initial evidence also suggests that both the agreeing and non-agreeing raising constructions are instances of hyper-raising, rather than copy-raising constructions.

To verify the validity of the diagnostic, it is clear that not all apparent raising constructions allow such continuity effects. Below is a construction using the verb *kwikora* ‘act like, pretend’ which has a similar syntactic appearance to *-roreka* but which does not retain idiomatic readings in the same way, and therefore appears to be an example of copy-raising.

- (50) mu-doga gw-ɲkoraa ndi gw-aku-simuk-a  
 3-car 3SM-acts.like that 3SM-PST-depart-FV  
 ‘The car is acting like it left.’<sup>10</sup>  
 ‘\*it looks like it is too late’

**Copy-Raising with Idiom**

*Idiomatic Meaning Unavailable*

**4.1.2 *-roreka* allows reconstructed readings**

Another diagnostic that has been employed to distinguish copy-raising from hyper-raising is whether the matrix subject must necessarily be the speaker’s perceptual source in a potential hyper-raising constructions: copy-raising constructions require the matrix subject to be the perceptual source, whereas (hyper-)raising constructions do not (§3.2).

Logoori allows for both agreeing and non-agreeing raising in situations where a perceptual-source reading is unavailable. In (51), the person who cut down the tree is both unseen and unknown, making it impossible for them to be a perceptual source. Both agreeing and non-agreeing raising therefore seem to have the same structure as the English example of true raising. If the embedded clause merely had a null subject coreferential with the main clause subject, we would expect the sentences to be infelicitous.

- (51) *Situation: On your walk to the store, you notice a tree on the ground that wasn’t there yesterday:*  
 mu-undu (a-/ga-) rorek-a (ndi) a-tem-i mu-saara  
 1-person 1SM-/6SM-seem-PRS that 1SM-cut-PST 3-tree  
 ‘Someone seems to have cut down the tree.’

**Reconstructed Reading Available**

The same is true for (52), where Adaro is unobserved, and both agreeing and non-agreeing raising is felicitous.

<sup>10</sup>This is not a strange sentence in Logoori, since cars can be talked about as actors on their own, rather than immediately discussing the drivers.

- (52) *Situation: The bathroom mirror is fogged up and there is water on the floor, but you don't see anyone:*  
 Adaro a-/ga- rorek-a ndi ji-isiing-i **Reconstructed Reading Available**  
 Adaro 1SM-/6SM-seem-PRS that 1SM-shower-PST  
 'Adaro seems to have showered.'

These constructions therefore pattern with the English, Lubukusu, and Lusaamia raising constructions in retaining idiomatic interpretations and not requiring a perceptual source reading of the subject. These connectivity effects suggest that *-roreka* in Logoori is an instance of a hyper-raising predicate and not copy-raising. Compare this with the copy-raising predicate 'acts like' that we introduced above: in contrast to the hyper-raising constructions in (52), the copy-raising predicate requires that the matrix subject be the perceptual source, and hence is infelicitous in a reconstructed reading context.

- (53) *Situation: The bathroom mirror is fogged up and there is water on the floor, but you don't see anyone:*  
 #Adaro ji-ikoraa ndi ji-isiing-i \* **Reconstructed Reading with Copy-Raising**  
 1Adaro 1SM-acts.like that 1SM-shower-PST  
 'Adaro looks like he showered.'

Again, this is further confirmation that *-roreka* predicates are in fact true (hyper-)raising constructions, as they show properties of raising constructions that are lacking in non-raising constructions.

## 4.2 Raised subjects extract like subjects in relative clauses

Recall that another question about putative hyper-raising constructions (especially non-agreeing hyper-raising) is whether the raised subject in fact has the properties of canonical subjects. The next diagnostic shows that apparent hyper-raised subjects of *-roreka* behave like true subjects of the main clause, as predicted by the hyper-raising analysis.

Like many Bantu languages, Logoori shows a consistent morphosyntactic distinction between subject and non-subject extraction in constructions like relative clauses. Non-subject relative clauses (54b) are formed with a complementizer element that agrees with the extracted element, whereas no complementizer is used in subject relative clauses (54a).<sup>11</sup>

- (54) a. N-dor-i mw-aana (\*w-a) \_\_\_ a-kony-aa Fii. **Subj Relative Clause**  
 1sgSM-see-PST 1-child (\*1-REL) REL.1SM-help-PRS 1Fii  
 'I saw the child who is helping Fii.'
- b. N-dor-i mw-aana \*(w-a) Jabu a-kony-aa \_\_\_. **Non-Subj Relative Clause**  
 1sgSM-see-PST 1-child 1-REL 1Jabu 1SM-help-PRS  
 'I saw the child who Jabu is helping.'

The example in (55) show that relative clauses headed by raised subjects of *-roreka* lack this agreeing complementizer, giving evidence for the subject status of the raised element in both agreeing and non-agreeing constructions.

- (55) N-dor-i mu-kaari (\*w-a) a-/ga- rorek-aa ndi a-gur-i r-baakuuli.  
 1sgSM-see-PST 1-woman (\*1-COMP) 1SM-/6SM-seem-PRS that 1SM-buy-PST 9-bowl  
 'I saw the woman who looks like she bought a bowl.' *Raised Element Extracts like Subj*

These first three diagnostics are summarized in the partial table below.

<sup>11</sup>A tonal difference also distinguishes subject relative clauses from declarative clauses, but the syntactic context and translation makes the distinction transparent here.



(56) **Raising Diagnostics by Construction**

Diagnostic	-roreka		LD Topics
	AGR-	ga-	
Idiomatic reading retained	✓	✓	*
Reconstructed reading possible	✓	✓	n/a
Subject-like extraction	✓	✓	n/a

**4.3 Subjects raised via A-movement**

The next two diagnostics show evidence of A-movement in the derivation of raising constructions, the third prediction of the hyper-raising analysis. A left dislocation analysis of the non-agreeing raising constructions is predicted to show evidence of A'-movement instead.

**4.3.1 Raised subjects create new binding possibilities**

One well known property of A-movement is that it generates new binding possibilities (i.e. binding can occur from surface positions) whereas A'-movement does not and instead reconstructs (i.e. binding reflects original positions, before movement) (see [Pesetsky 2013](#) and [Richards 2014](#) for overview discussions of these well-attested patterns).

[Halpert \(2016\)](#) shows that in Zulu, a raised pronominal subject creates a principle C binding violation that is not present in an unraised construction, suggesting that raising is A-movement to subject position. As is typical for Bantu languages, the weak pronoun is null (*pro*), visible in agreement on the verb. In the unraised construction (57a), *pro* can be coreferent with an R-expression inside a high adjunct in the embedded clause, as neither DP c-commands the other. The hyper-raising construction in (57b) eliminates coreference between *pro* and the R-expression; in this configuration, *pro* c-commands the R-expression, leading Halpert to interpret this as a Principle C violation.

(57) Zulu binding violation: ([Halpert, 2016](#), 36)

- a. ku-fanele [ukuthi [ngo-buhlakana buka(Sipho<sub>i</sub>)] (pro<sub>i</sub>) a-m-siz-e uThemba]  
 17s-necessary that NGA-AUG.14wisdom 14ASSOC.1Sipho *pro* 1sJC-1O-help-sJC AUG.1Themba  
 'It's necessary that out of Sipho<sub>i</sub>'s wisdom, he<sub>i</sub> helps Themba.'
- b. \*(pro<sub>j</sub>) u-fanele [ukuthi [ngo-buhlakana buka(Sipho<sub>i</sub>)] t<sub>i</sub> a-m-siz-e uThemba]  
 pro 1s-necessary that NGA-AUG.14wisdom 14ASSOC.1Sipho 1sJC-1O-help-sJC AUG.1Themba

This is a typical property of A-movement (creating a new binding position for the purposes of Principle C): [Halpert \(2016, 2018\)](#) argues that hyper-raising constructions are instances of A-movement to matrix subject position.

Logoori shows the same pattern: where *pro* may be coreferent with the R-expression *Jabu* in the unraised example in (58), as neither DP c-commands the other. But in (59) *pro* loses its ability to refer to *Jabu* when it is raised (59), a principle C effect, induced by A-movement of *pro* to matrix subject position.

- (58) ga-rorek-a ndr mu-ri-haana ry-a (Jabu<sub>k</sub>) (pro<sub>k/i</sub>) a-kony-aa Fii. **Unraised**  
 6SM-seem-FV that 18-5-generosity 5-ASSOC 1Jabu pro 1SM-help-PRS Fii  
 'It seems that in Jabu<sub>k</sub>'s generosity, he<sub>k/i</sub> is helping Fii.' *Coreference Allowed*
- (59) (pro<sub>k/i</sub>) a-rorek-a ndr mu-ri-haana ry-a (Jabu<sub>k</sub>) t a-kony-aa Fii. **Agreeing Raising**  
 pro<sub>k/i</sub> 1SM-seem-FV that 18-5-generosity 5-ASSOC 1Jabu<sub>k</sub> t 1SM-help-PRS Fii  
 'He<sub>k/i</sub> seems in Jabu<sub>k</sub>'s generosity to be helping Fii.' *Coreference Unacceptable*

In *ga*-raising, a *pro* subject is not clearly referenced in the surface form (given the non-agreeing subject agreement form) but an overt weak pronoun is still possible in such a construction. Notably, it generates the same unacceptable coreference that agreeing raising does:

- (60)  $\overline{\text{ye}^k/i}$  ga-rorek-a ndr<sub>i</sub> mu-ri-haana ry-a  $\overline{\text{Jabu}_k}$  t a-kony-aa Fii. **Non-agreeing Raising**  
 $\text{ye}^k/i$  6SM-seem-FV that 18-5-generosity 5-ASSOC 1Jabu<sub>k</sub> t 1SM-help-PRS Fii  
 ‘He<sup>k/i</sup> seems in Jabu<sub>k</sub>’s generosity to be helping Fii.’ *Coreference Unacceptable*

Again assuming that A-movement can generate new positions for binding (while A'-movement cannot), these data suggest that *ga*-raising with *-roreka* is in fact A-movement (to matrix subject position), rather than a topicalization construction generated by A'-movement. Likewise, agreeing raising also behaves like A-movement.

#### 4.3.2 Cyclic raising with statives

In order to further distinguish A-movement from A'-movement, we rely on the common assumption that A'-movement cannot feed A-movement (commonly referred to as the Ban on Improper Movement) (Chomsky, 2008; Obata and Epstein, 2011). If non-agreeing raising were an instance of A'-movement (topicalization), it should not be able to undergo additional A-movement as an A'-moved phrase would be expected to be frozen in its scope position (Rizzi, 2007; Corver, 2017).

Relying on the assumption that agreeing raising is an example of true raising that uses A-movement (as evidenced by the binding patterns above), we show that a subject can cyclically raise into multiple raising predicates. Statives, marked by the stative suffix *ek/ik*, are a larger class of verbs of which *-roreka* is a member, and generally show similar raising properties to *-roreka*.<sup>12</sup> An unraised example of *-roreka* with the stative verb *-amanyikana* ‘to be known’ is shown below.

- (61)  $\overline{\text{ga}}$ -amany-ikan-a ndr<sub>i</sub>  $\overline{\text{ga}}$ -rorek-aa kuri mu-doga gw-aku-simuka. **Unraised**  
 6SM-know-STAT-PRES that 6SM-seem-PRS that 3-car 3SA-PST-depart-FV  
 ‘It is known that it seems like the car departed.’  
 ‘It is known that it seems to be too late.’

The embedded subject can cyclically raise to the subject position of the highest clause, as shown in (62), which involves two instances of agreeing raising. Class 3 subject agreement in the intermediate clause shows that the subject *mudoga* must have initially raised to that clause. The fact that it could then raise a second time supports the claim that the sentence is derived through A-movement, since A'-movement would block further raising.<sup>13</sup>

- (62) mu-doga<sub>k</sub>  $\overline{\text{gw}}$ -a-amany-ikan-a [<sub>CP</sub> ndr<sub>i</sub> t<sub>k</sub>  $\overline{\text{ga}}$ -rorek-aa [<sub>CP</sub> kuri t<sub>k</sub> gw-aku-simuka. **AGR, AGR**  
 3-car 3SM-PRS-know-STAT-FV that 3SM-seem-PRS that 3SM-PST-depart-FV  
 ‘The car is known to seem to have departed.’  
 ‘It is known that it seems to be too late.’ *Idiomatic Meaning Retained*

Crucially, cyclic raising is available even when the intermediate clause is a non-agreeing raising construction. If the intermediate non-agreeing raising were formed with A'-movement (a topicalization structure with an expletive filling canonical subject position), we would not expect the subject to be able to raise a second time through A-movement. This example is shown in (63) with both agreeing and non-agreeing main clauses, and once again suggests that non-agreeing *ga*-raising is an instance of true hyper-raising, not dislocation. The expectation is that A'-movement ought to be unable to feed A-movement.

- (63) a. mu-doga<sub>k</sub>  $\overline{\text{ga}}$ -amany-ikan-a [<sub>CP</sub> ndr<sub>i</sub> t<sub>k</sub>  $\overline{\text{ga}}$ -rorek-aa [<sub>CP</sub> kuri t<sub>k</sub> gw-aku-simuka. **ga-, ga-**  
 3-car 6SM-know-STAT-PRS that 6SM-seem-PRS that 3SM-PST-depart-FV  
 ‘The car is known to seem to have departed.’  
 ‘It is known that it seems to be too late.’ *Idiomatic Meaning Retained*
- b. mu-doga<sub>k</sub>  $\overline{\text{gw}}$ -amany-ikan-a [<sub>CP</sub> ndr<sub>i</sub> t<sub>k</sub>  $\overline{\text{ga}}$ -rorek-aa [<sub>CP</sub> kuri t<sub>k</sub> gw-aku-simuka. **AGR, ga-**  
 3-car 3SM-know-STAT-PRS that 6SM-seem-PRS that 3SM-PST-depart-FV  
 ‘The car is known to seem to have departed.’  
 ‘It is known that it seems to be too late.’ *Idiomatic Meaning Retained*

<sup>12</sup>Some initial data on the raising properties of statives can be found in Mountjoy-Venning (2016), an earlier version of this work.

<sup>13</sup>This argument in isolation only supports the claim that agreeing raising with distinct verbs is the same kind of movement, not a specific kind of movement. Taken as a whole with the binding evidence and the cyclic raising with non-agreeing raising, however, this is part of the picture that both agreeing and non-agreeing raising in Logoori are instances of A-movement.

If movement to the main clause is A-movement (perhaps most clear with agreeing raising in (63b)), then the raising into the intermediate clause must also have been A-movement: if that intermediate *ga*-raising construction was in fact A'-movement, we would expect (based on the ban on improper movement) that the moved phrase would be unable to subsequently A-move to the matrix clause. What's more, the examples above utilize an idiom diagnostic, showing again that even in long-distance raising contexts, an idiomatic reading is retained (recalling from (49b) above that idiomatic readings are lost when the subject of the idiom is left-dislocated).

At this point all three predictions of a hyper-raising analysis have been borne out by the Logoori data. Both agreeing and non-agreeing raising constructions show connectivity effects and evidence for A-movement, and the raised subject behaves like a true subject. These diagnostics are summarized below:

(64) **Raising Diagnostics by Construction**

Diagnostic	-roreka		LD Topics
	AGR-	ga-	
Idiomatic reading retained	✓	✓	*
Reconstructed reading possible	✓	✓	n/a
Subject-like extraction	✓	✓	n/a
New binding possibilities	✓	✓	no
Intermediate in multiple-raising cycle	✓	✓	n/a

#### 4.4 Two contrasts between non-agreeing *ga*-raising and topicalization

Two additional diagnostics distinguish non-agreeing raising and topicalization, again confirming that *ga*-raising patterns with agreeing raising rather than dislocation, and should be analyzed with the structure in (65a), not (65b).

- (65) a. [ SUBJ<sub>k</sub> *ga*<sub>i</sub>-seems [CP that t<sub>k</sub> [TP ... ] ] ] **Non-Agreeing Raising Analysis**  
 b. [ SUBJ<sub>k</sub> [ (**expl**<sub>i</sub>) *ga*<sub>i</sub>-seems [CP that t<sub>k</sub> [TP ... ] ] ] ] **Expletive + Dislocation Analysis**

##### 4.4.1 Topics are old information; *ga*-raised subjects can be new information

Left-dislocated phrases must be discourse-familiar information, and don't serve well as the answer to a content question. Examples (67a)-(67c) are all relatively natural answers to the question in (66), including (67c) where the answer to the question is the embedded subject. In contrast, left-dislocating (topicalizing) the embedded subject that answers the question results in infelicity (67d).

- (66) Ni **vwaha** y-aa-tany-i ri-dirisha? **wh-Question**  
 be 1who 1SM-PST-break-PST 5-window  
 'Who is it that broke the window?'
- (67) a. **Jabu** ni-ye y-aa-tany-i ri-dirisha. **Cleft Answer**  
 1Jabu COP-1 1SM-PST-break-PST 5-window  
 'Jabu is the one who broke the window.'
- b. **Jabu** y-aa-tany-i ri-dirisha. **Declarative Answer**  
 1Jabu 1SM-PST-break-PST 5-window  
 'Jabu broke the window.'
- c. Suuvir-a ndr **Jabu** y-aa-tany-i ri-dirisha. **Embedded Answer**  
 1sgsm.believe-FV that 1Jabu 1SM-PST-break-PST 5-window  
 'I think/believe that Jabu broke the window.'
- d. # **Jabu**, suuvir-a ndr y-aa-tany-i ri-dirisha. **#Left-Dislocated Answer**  
 1Jabu 1sgsm.believe-FV that 1SM-PST-break-PST 5-window  
 'As for Jabu, I believe that he broke the window.'

While left-dislocated phrases must be familiar information, in raising contexts, subjects in both agreeing raising and non-agreeing raising can serve well as answers to a subject wh-question. Both (68a) and (68b) are comfortable answers to the same question from above, further evidence that neither construction is an instance of dislocation.

(68) *In response to (66):*

- |   |   |
|---|---|
| <p>a. <b>Jabu</b> ga-rorek-a ndi y-aa-tany-i ri-dirisha.<br/>1Jabu 6SM-seem-FV that 1SM-PST-break-PST 5-window<br/>'Jabu seems like he broke the window.'</p> | <p><b>Non-Agreeing Raising Answer</b></p> |
| <p>b. <b>Jabu</b> a-rorek-a ndi y-aa-tany-i ri-dirisha.<br/>1Jabu 1SM-seem-FV that 1SM-PST-break-PST 5-window<br/>'Jabu seems like he broke the window.'</p>  | <p><b>Agreeing Raising Answer</b></p>     |

The crucial contrast is between (68a) and (67d). If non-agreeing raising were a left-dislocating construction, we would expect (68a) to be infelicitous, just like (67d). The felicity of the *ga*-raising example, however, shows that it behaves like true (hyper-)raising to subject.

#### 4.4.2 Left-dislocation is not possible inside a RC; *ga*-raising IS possible

This final diagnostic looks at the possibility of dislocation versus raising inside a relative clause, again showing a distinction between dislocated topics and *ga*-raising constructions. A baseline example of a left dislocated object is shown in (69b):

- (69) a. Jabu y-a-yaanza ri-booso  
1Jabu 1SM-PRS-like 5-ugali  
'Jabu likes ugali.'
- b. ri-booso, Jabu y-a-ri-yaanza **Left-dislocated Object**  
5-ugali 1Jabu 1SA-PRES-5OM-like  
'Ugali, Jabu likes it.'

As is clear from the example in (70b) below, left-dislocation is impossible inside a relative clause:

- (70) a. n-zizuriz-aa ma-diku g-a Jabu y-a-yaanza ri-booso.  
1sgSM-remember-PRS 6-day 6-COMP 1Jabu 1SM-PRS-like 5-ugali  
'I remember the days when Jabu liked ugali.'
- b. \* n-zizuriz-aa ma-diku g-a **ri-booso**, Jabu y-a-ri-yaanza **\*Left-dis Obj in RC**  
1sgSM-remember-PRS 6-day 6-COMP 5-ugali 1Jabu 1SA-PRES-5OM-like  
'I remember the days when ugali, Jabu liked it.'

In contrast, both agreeing (71a) and non-agreeing raising (71b) can occur readily inside a relative clause, unlike the left dislocation in (70b) above.

- (71) a. n-zizuriz-aa ma-diku g-a **Jabu ya-a-rorek-a** ndi ya-a-ri y-a-yaanza ri-booso  
1sgSM-remember-PRS 6-day 6-COMP 1Jabu 1SM-PRES-seem-FV that 1SM-PRS-be 1SM-PRS-like 5-ugali  
'I remember the days when Jabu seemed to like ugali.'
- b. n-zizuriz-aa ma-diku g-a **Jabu ga-a-rorek-a** ndi ya-a-ri y-a-yaanza ri-booso  
1sgSM-remember-PRS 6-day 6-COMP 1Jabu 6SM-PRS-seem-FV that 1SM-PRS-be 1SM-PRS-like 5-ugali  
'I remember the days when Jabu seemed to like ugali.'

This is once again evidence that the raised subject in non-agreeing *ga*-raising is behaving like a subject, not a left-dislocated topic, showing that non-agreeing raising is a hyper-raising construction that is not significantly different (in all of the diagnostics we've considered) from the agreeing raising construction.

## 4.5 Intermediate summary

In this section we have used seven diagnostics to show that *-roreka* consistently shows the properties of raising (as opposed to copy-raising and/or left dislocation) in both its agreeing and non-agreeing forms. With respect to non-agreeing (*ga-*) raising in particular, it shows crucial distinctions with topicalization in multiple instances (instead patterning with agreeing raising). This suggests that *ga*-raising with *-roreka* ‘seems/appears’ is not an instance of dislocation with expletive agreement, but is instead an instance of hyper-raising (to subject position) with an alternative subject agreement. The diagnostic findings are summarized below:

### (72) Raising Diagnostics by Construction

Diagnostic	<i>-roreka</i>		LD Topics
	AGR-	<i>ga-</i>	
Idiomatic reading retained	✓	✓	*
Reconstructed reading possible	✓	✓	n/a
Subject-like extraction	✓	✓	n/a
New binding possibilities	✓	✓	TBD
Intermediate in multiple-raising cycle	✓	✓	n/a
Can be new information	✓	✓	*
Possible inside RC?	✓	✓	*

The *-roreka* facts above are strong confirmation that *both* agreeing and non-agreeing hyper-raising-to-subject exist. Halpert (2016, 2018) has demonstrated this convincingly for Zulu, but the Logoori pattern here is an important replication of those findings. This is specifically the case for non-agreeing raising, which (to our knowledge) has not been documented in published work apart from Zulu.<sup>14</sup> This of course reinforces the same theoretical questions raised by hyper-raising in the first place, though we will continue our empirical analysis of Logoori before engaging those in depth.

## 5 Logoori *-fwaana*: an expletive + dislocation construction

This section explores another raising verb in Logoori (*-fwaana* ‘appear’), showing that it is a hyper-raising predicate that shares the features of *-roreka* in various ways, but lacks the non-agreeing *ga*-raising construction discussed above. We again use the same seven diagnostics from §4, demonstrating that agreeing *-fwaana* raising patterns with *-roreka* raising. In contrast to the *-roreka* findings, however, we show that *ga-fwaana* constructions should be analyzed with the structure in (73b), unlike *ga-roreka* constructions, which we showed in section 4 have the structure in (73a).

- (73) a. [ SUBJ<sub>k</sub> **ga**<sub>i</sub>-appears [CP that t<sub>k</sub> [TP ... ] ] ] Non-Agreeing Raising Analysis  
 b. [ SUBJ<sub>k</sub> [ (**expl**<sub>i</sub>) **ga**<sub>i</sub>-appears [CP that t<sub>k</sub> [TP ... ] ] ] ] Expletive + Dislocation Analysis

A basic example of *-fwaana* in both an unraised and agreeing raising construction is shown below:

- (74) *ga-fwaan-aa ndi Jabu a-ziiy-i kare.* Unraised Form  
 6SM-appear-PRS (that) 1Jabu 1SM-leave-PST early  
 ‘It appears that Jabu left early.’
- (75) *Jabu a-fwaan-aa (ndi) a-ziiy-i kare.* Agreeing Raising  
 1Jabu 1SM-appear-PRS (that) 1SM-leave-PST early  
 ‘Jabu appears to have left early.’

<sup>14</sup>Though we will note that we have documented its presence in Lubukusu, Tiriki, and Wanga as well.

## 5.1 Initial evidence that agreeing *-fwaana* raising is true hyper-raising

### 5.1.1 Agreeing *-fwaana* retains idiomatic interpretations

Similar to what we observed with *-roreka*, the evidence suggests that agreeing raising with *-fwaana* is indeed movement-based raising. For example, the subject of an embedded sentential idiom may be raised with *-fwaana* and retain its idiomatic reading.

- (76) mu-doga gu-fwaan-aa ndi gw-aku-simuka. **Agreeing Raising with Idiom**  
3-car 3SM-appear-PRS that 3SM-PST-depart  
'The car appears to have departed.'  
'It appears to be too late.' *Idiomatic Meaning Retained*

This corresponds to the behavior of *-roreka* in the idiom diagnostic from section 4.1.1, suggesting that agreeing raising with *-fwaana* is true hyper-raising as opposed to copy-raising.

### 5.1.2 Agreeing *-fwaana* allows reconstructed readings

Likewise, raised subjects do not have to be perceptual sources in agreeing raising with *-fwaana*. A reconstructed reading is acceptable, shown by (77b), which is felicitous even when there are no animals to serve as perceptual sources. This is indicative of true raising rather than copy-raising, as discussed in section 4.1.2.

- (77) *Context: You are in a game park driving around looking for animals, but you see no animals:*
- a. ga-fwaan-aa ndi zi-nyama zy-umburimu zi-gon-aa. **Unraised Form**  
6SM-appear-PRS that 10-animal 10-wild 10SM-sleep-PRES  
'It appears that the wild animals are sleeping.'
- b. zi-nyama zy-umburimu zi-fwaan-aa ndi zi-gon-aa. **Recons. Reading Available**  
10-animals 10-wild 10SM-appear-PRS that 10SM-sleep-PRES  
'The wild animals appear to be sleeping.' (acceptable with no direct visual evidence)

### 5.1.3 Agreeing *-fwaana* extracts like a usual subject

The subject properties of the raised subject are also retained in agreeing *-fwaana* constructions, further supporting the hyper-raising analysis. Recall from section 4.2 that non-subject relative clauses are formed with an agreeing complementizer while subject relative clauses are not. As is true for *-roreka*, a raised subject with agreeing *-fwaana* extracts like a subject, shown in (78) where the relative clause headed by the raised subject does not take an agreeing complementizer.

- (78) n-dor-i mu-kaari (\*w-a) a-fwaan-aa (ndi) a-gur-i i-baakuuli  
1SG-see-PST 1-woman (\*1-REL) 1SM-appear-PRS (that) 1SM-buy-PST 9-bowl  
'I saw the woman who looks like she bought a bowl.' *Raised Element Extracts like Subj*

### 5.1.4 Agreeing *-fwaana* behaves distinctly from *ga-fwaana*

There are stark differences between *-roreka* and *-fwaana*, however. Specifically, non-agreeing raising is strongly ruled out with *-fwaana* in the same contexts where *ga-roreka* is fine:

- (79) #Jabu ga-fwaan-aa ndi a-ziiy-i kare. **#Non-Agr Raising**  
1Jabu 6SM-appear-PRS that 1SM-leave-PST early  
'Jabu appears to have left early.'

Despite the strong judgments to this effect, it is possible to generate something that appears to be non-agreeing raising with *-fwaana*, requiring a specific context. If someone asks for a general update with a question along the lines of "are there any updates?" the *ga-fwaana* construction becomes an acceptable response:

- (80) a. Q: ma-riporti?  
           6-reports  
           ‘Any updates?’
- b. A: Jabu ga-fwaan-aa ndi a-kony-aa Fii. **Apparent Non-agreeing Raising**  
       1Jabu 6SM-appear-PRS that 1SM-help-PRS 1Fii  
       ‘As for Jabu they (the reports) seem like he is helping Fii.’

However, the *ga*-agreement in this construction appears to be referential – referring to the reports that are being given. At first glance, then, *ga-fwaana* constructions seem not to be non-agreeing hyper-raising, but examples of dislocation. *Jabu* in (80b) looks to be left-dislocated, with a distinct null subject (referring to *maripoti* ‘the reports’) that controls agreement.

The diagnostics given below confirm this: they consistently show that *ga-fwaana* constructions do not behave like movement-based raising to matrix subject position, instead supporting the dislocation with expletive agreement analysis from (73b).

## 5.2 Evidence that *ga-fwaana* constructions are not true raising

We saw in section 4 that apparent *ga*-raising with *-roreka* fit the predictions of hyper-raising. Here we will see that *ga*-raising with *-fwaana*, on the other hand, conforms to the predictions of the dislocation analysis.

### 5.2.1 Idiomatic interpretations are not retained with *ga-fwaana*

In (49b), we saw that left dislocating the subject of an embedded idiom does not show the same connectivity effects that raising the subject does, and the idiomatic interpretation is lost. The same is true for apparent *ga*-raising with *ga-fwaana*, which blocks an idiomatic interpretation, in contrast to what we saw for agreeing *-fwaana* raising in (76), and also in contrast to *ga*-raising with *-roreka* from section 4.1.1.

- (81) mu-doga ga-fwaan-aa ndi gw-aku-simuka. **Non-Agreeing Raising with Idiom**  
       3-car 6SM-appear-PRS that 3SA-PST-depart  
       ‘The car, (reports) seem like it departed.’  
       \*‘It appears to be too late.’ *Idiomatic Meaning Unavailable*

We can see, therefore, that apparent non-agreeing raising with the *-fwaana* predicate *lacks* the connectivity effects that are typical of (hyper-)raising constructions.

### 5.2.2 Reconstructed readings not possible with *ga-fwaana*

The reconstructed reading diagnostic is designed to distinguish between hyper-raising and copy-raising, but cannot distinguish between hyper-raising and dislocation, since in both instances the apparent subject can be reconstructed to the embedded clause. Direct perceptual evidence is not necessary for the non-agreeing construction with *-fwaana*, as (82) shows. But notably, our typical context for a reconstructed reading does not work on its own, instead requiring a context that makes salient the notion of a report being offered.

- (82) *Context: You are in a game park driving around looking for animals, but you see no animals*  
       zi-nyama zy-u-mburimu ga-fwaan-aa ndi zi-gon-aa.  
           10-animal 10-of-bush 6SM-appear-PRS that 10SM-sleep-PRS  
       ‘The wild animals, the evidence appears that they are sleeping.’ # With no additional context  
       ✓: after returning from the game drive, in response to the question, *Mariporti?* ‘Any Updates?’

This indicates that non-agreeing *-fwaana* is not copy-raising (though it wasn’t expected to behave as such); the infelicity in a non-prompted context shows that it still contrasts with examples of true raising, however. We see, therefore, that the idiom and reconstructed reading diagnostics both show distinct properties from the *-roreka* construction. Purportedly raised subjects don’t show the same connectivity effects with idioms, and the reconstructed reading context introduces distinct evidentiality requirements, suggesting that the matrix subject is in fact something like a null *maripoti* ‘reports,’ rather than the apparent raised subject.

### 5.2.3 Fronted subjects with *ga-fwaana* don't extract like subjects

We again see that the fronted subject of an agreeing *-fwaana* construction extracts like a subject in (83b). The fronted subject in a *ga-fwaana* construction cannot be extracted at all (83c), however, in contrast to the facts that we saw for *ga-raising* with *-roreka* previously in section 4.2.

- (83) a. n-dor-i          mw-aana (\*w-a) a-kony-aa          Fii.  
 1sgSM-see-PST 1-child (\*1-REL) REL.1SM-help-PRS 1Fii  
 'I saw the child who is helping Fii.'
- b. n-dor-i          mw-aana (\*w-a) a-fwaan-aa          ndi a-kony-aa          Fii.          **Agreeing Raising**  
 1sgSM-see-PST 1-child (\*1-REL) REL.1SM-appear-PRS that 1SM-help-PRS 1Fii  
 'I saw the child who appears to be helping Fii.'          *Raised Element Extracts like Subj*
- c. \* n-dor-i          mw-aana (w-a) ga-fwaan-aa          ndi a-kony-aa          Fii.          **ga-fwaana Fronting**  
 1sgSM-see-PST 1-child (1-REL) REL.6SM-appear-PRS that 1SM-help-PRS 1Fii  
 'I saw the child who appears to be helping Fii.'          *Fronted Element Cannot be Extracted*

It is unclear why exactly extraction is not possible in (83c), since non-subjects should still be able to extract using the agreeing complementizer. Regardless, there is a crucial distinction between agreeing and non-agreeing *-fwaana* raising with respect to extraction, with this diagnostic showing that the apparent subject of a *ga-fwaana* construction does not in fact show subject properties, and should therefore not be considered an instance of raising.

### 5.2.4 *ga-fwaana* construction does not create new binding possibilities

A-movement creates new binding possibilities from the surface form, whereas A'-movement reconstructs. If *ga-raising* does *not* consist of A-movement to matrix subject position, we expect it to not create new binding possibilities, which is what we see below in (85b). In the unraised form (84), the weak pronoun *ye* is bound by and can corefer with *Jabu*. We see in (85a) that agreeing *-fwaana* raising changes the binding relationships, and *ye* can no longer corefer with *Jabu*, but the original binding is preserved in (85b), indicating a lack of A-movement in *ga-fwaana* constructions.

- (84) ga-fwaan-aa          ndi mu-ri-haana          ry-a Jabu<sub>k</sub> ye<sub>k/i</sub> a-kony-aa          Fii.          **Unraised**  
 6SM-appear-PRS that 18-5-generosity 5-of 1Jabu<sub>k</sub> s/he<sub>k/i</sub> 1SM-help-PRS 1Fii  
 'It looks like in Jabu<sub>k</sub>'s generosity, he<sub>k/i</sub> is helping Fii.'          *Coreference Allowed*
- (85) a. Agreeing Raising: Coreference Banned  
(ye<sub>i/\*k</sub>) a-fwaan-aa          ndi mu-ri-haana          ry-a Jabu<sub>k</sub> a-kony-aa          Fii.  
 s/he<sub>k\*/i</sub> 1SM-appear-PRS that 18-5-generosity 5-of 1Jabu<sub>k</sub> 1SM-help-PRS 1Fii  
 'It looks like in Jabu<sub>k</sub>'s generosity, he<sub>i/\*k</sub> is helping Fii.'
- b. ga-fwaana construction with fronting: Coreference Allowed  
ye<sub>k/i</sub> ga-fwaan-aa          ndi mu-ri-haana          ry-a Jabu<sub>k</sub> a-kony-aa          Fii.          **Fronted Subject**  
 s/he<sub>k/i</sub> 6SM-appear-PRS that 18-5-generosity 5-of 1Jabu<sub>k</sub> 1SM-help-PRS 1Fii  
 'It looks like in Jabu<sub>k</sub>'s generosity, he<sub>k/i</sub> is helping Fii.'

It takes a particular situation to make a sentence like (85b) acceptable. Particularly, one in which the referent of the pronoun–*Jabu* here–is quite familiar from discourse, as well as one in which a general account of events has been solicited in some way. If such a context is constructed, however, the crucial fact is that coreference between the raised pronoun and *Jabu* is acceptable, in contrast with what we find for agreeing *-fwaana* raising in (85a), which shows evidence of A-movement, just like both agreeing and non-agreeing raising with *-roreka*.

These sentences demonstrate that agreeing *-fwaana* raising creates new binding possibilities while the *ga-fwaana* construction does not, which is consistent with an analysis of the preverbal element in *ga-fwaana* constructions being a left-dislocated topic rather than a true subject in an A-position.



### 5.2.5 *ga-fwaana* construction cannot feed further raising

Unsurprisingly at this point, *ga-fwaana* also does not show evidence of A-movement in cyclic raising constructions, while agreeing raising with *-fwaana* does. Previously in section 4.3.2 we saw that both agreeing and non-agreeing raising with *-roreka* readily allowed further raising to subject. To test this with *-fwaana* we again use an agreeing stative in the higher clause, for which we assume an embedded subject A-moves to its subject position.

First, we demonstrate that intermediate raising is acceptable for both agreeing and non-agreeing *-fwaana* raising. Given our line of argumentation to this point, we would expect that (87) consists of a left-dislocated topic in the left periphery of the embedded clause:

(86) *ga-amany-ik-aa* ndi **Jabu** *a-fwaan-aa* ndi *a-kony-aa* Fii.  
 6SM-know-STAT-PRS that 1Jabu 1SM-appear-PRS that 1SM-help-PRS 1Fii  
 ‘It is known that Jabu appears to be helping Fii.’

(87) *ga-amany-ik-aa* ndi **Jabu** *ga-fwaan-aa* ndi *a-kony-aa* Fii.  
 6SM-know-STAT-PRS that 1Jabu 6SM-appear-PRS that 1SM-help-PRS 1Fii  
 ‘It is known that Jabu appears to be helping Fii.’

Crucially for this diagnostic, however, (and in contrast to what was seen in non-agreeing *ga*-raising with *-roreka*) a *ga-fwaana* construction in the intermediate clause cannot feed agreeing raising to the main clause, seen in (89). Further raising is perfectly acceptable from the agreeing *-fwaana* construction in the intermediate clause of (88), on the other hand.

(88) Cyclic Agreeing Raising  
**Jabu** *y-amany-ik-aa* ndi *a-fwaan-aa* ndi *a-kony-aa* Fii.  
 1Jabu 1SM-know-STAT-PRS that 1SM-appear-PRS that 1SM-help-PRS 1Fii  
 ‘It is known that Jabu appears to be helping Fii.’

(89) \*Cyclic Raising w/ *ga*-  
 \***Jabu** *y-amany-ik-aa* ndi *ga-fwaan-aa* ndi *a-kony-aa* Fii.  
 1Jabu 1SM-know-STAT-PRS that 6SM-appear-PRS that 1SM-help-PRS 1Fii  
 ‘It is known that Jabu appears to be helping Fii.’

Agreeing *-fwaana* raising continues to pattern with *-roreka*, showing evidence for A-movement, while the *ga-fwaana* construction again looks to be generated by fronting the subject through left-dislocation, with some other syntactic element (e.g. a null expletive triggering class 6 agreement) in subject position. A'-movement (the dislocation) in the intermediate clause cannot feed A-movement into a higher clause, blocking *Jabu* from raising to the main clause in (89).

### 5.2.6 Fronted subject in *ga-fwaana* construction cannot be new information

The fronted subject in *ga-fwaana* constructions cannot be new information, in contrast to the pattern for non-agreeing *ga-roreka* raising discussed in section 4.4.1. Agreeing *-fwaana* raising is acceptable in response to a subject question in (90b), whereas a *ga-fwaana* construction is infelicitous in (90c).

- (90) a. Ni vwaha *a-kony-aa* Fii? **wh-Question**  
 is 1who 1SM-help-PRS 1Fii  
 ‘Who is helping Fii?’
- b. **Jabu** *a-fwaan-aa* ndi *a-kony-aa* Fii. **Subj Can be Answer in Agr Raising**  
 1Jabu 1SM-appear-PRS that 1SM-help-PRS Fii  
 ‘Jabu appears to be helping Fii.’
- c. # **Jabu** *ga-fwaan-aa* ndi *a-kony-aa* Fii. **Subj Cannot be Answer in Non-Agr Raising**  
 1Jabu 6SM-appear-PRS that 1SM-help-PRS Fii  
 ‘Jabu appears to be helping Fii.’

The subject in a *ga-fwaana* construction therefore patterns with left-dislocated topics, rather than with subjects, which in raising constructions are readily compatible with a new information reading. This again shows a crucial contrast between *ga-fwaana*, which appears to be left-dislocation, and *ga-roreka*, which patterns with agreeing raising in being true hyper-raising.

### 5.2.7 *ga-fwaana* construction is not possible inside a RC

Recall from above that a left-dislocated topic is ruled out inside a relative clause, demonstrated again in (91), but *ga*-raising with *-roreka* was perfectly acceptable in the same environment (see section 4.4.2).

- (91) \* n-zizuriz-aa ma-diku g-a ri-booso, Jabu y-a-ri-yaanza \*Left-dis Obj in RC  
 1sgSM-remember-PRS 6-day 6-COMP 5-ugali 1Jabu 1SM-PRS-5OM-like  
 'I remember the days when ugali, Jabu liked it.'

In the same context for *-fwaana*, the raised subject is natural with agreeing raising (92a), but the *ga-fwaana* construction is ruled out in (92b), matching the behavior of left-dislocated topic constructions rather than hyper-raising ones.

- (92) a. n-zizuriz-aa ma-diku g-a Jabu y-aa-fwaana ndi y-a-ri y-a-yaanz-a ri-booso  
 1sgSM-remember-PRS 6-day 6-COMP 1Jabu 1SM-PST-appear that 1SG-PST-be 1SG-PST-like-FV 5-ugali  
 'I remember the days when Jabu seemed to like ugali.'  
 b. \*n-zizuriz-aa ma-diku g-a Jabu g-aa-fwaana ndi y-a-ri y-a-yaanz-a ri-booso.  
 1sgSM-remember-PRS 6-day 6-COMP 1Jabu 6SM-PST-appear that 1SG-PST-be 1SG-PST-like-FV 5-ugali  
 'I remember the days when Jabu seemed to like ugali.'

This is yet another contrast between non-agreeing raising in *ga-roreka* and non-agreeing subject-fronting with *ga-fwaana*. Again, it appears that the fronted 'subject' in the *-fwaana* non-agreeing cases is not in fact a true subject at all, instead patterning like a left-dislocated topic, whereas agreeing raising with *-fwaana* behaves like true raising.

- (93) ri-booso, Jabu y-a-ri-yaanza Left-dislocated Object  
 5-ugali 1Jabu 1SA-PRES-5OM-like  
 'Ugali, Jabu likes it.'

## 5.3 Coreference with experiencer OM

The following sentences construct a binding diagnostic by adding an experiencer to the main-clause perception predicate via an applicative morpheme. The experiencer is represented with an object marker on the verb.

As we would expect, a raised subject in an agreeing construction cannot corefer with an object marker of the same class. This is true for the agreeing forms of both predicates, *-roreka* and *-fwaana*.

- (94) a. Jabu<sub>k</sub> a-mu\*<sub>k/i</sub>-rorek-er-aa ndi a-kony-aa Fii. Agreeing Raising w/ *-roreka*  
 1Jabu<sub>k</sub> 1SM-OM\*<sub>k/i</sub>-seem-APPL-PRS that 1SM-help-PRS 1Fii  
 'Jabu<sub>k</sub> seems to him\*<sub>k/i</sub> to be helping Fii.' Coreference w/ Obj Unacceptable  
 b. Jabu<sub>k</sub> a-mu\*<sub>k/i</sub>-fwaan-er-aa ndi a-kony-aa Fii. Agreeing Raising w/ *-fwaana*  
 1Jabu<sub>k</sub> 1SM-OM-appear-APPL-PRS that 1SM-help-PRS 1Fii  
 'Jabu<sub>k</sub> appears to him\*<sub>k/i</sub> to be helping Fii.' Coreference w/ Obj Unacceptable

However, a contrast emerges in the *ga*-forms. Raising with *ga-roreka* creates non-coreference with the object marker, as is expected if *ga-roreka* consists of raising to subject position. The distinction that arises is with *ga-fwaana* in (95b), where coreference is in fact possible:

- (95) a. Jabu<sub>k</sub> a-mu\*<sub>k/i</sub>-rorek-er-aa ndi a-kony-aa Fii. Non-agreeing Raising w/ *-roreka*  
 1Jabu<sub>k</sub> 1SM-OM\*<sub>k/i</sub>-seem-APPL-PRS that 6SM-help-PRS 1Fii  
 'Jabu<sub>k</sub> seems to him\*<sub>k/i</sub> to be helping Fii.' Coreference w/ Obj Still Unacceptable

- b. Jabu<sub>k</sub> ga-mu<sub>k/i</sub>-fwaan-er-aa ndr a-kony-aa Fii. **Non-agreeing Raising w/ -fwaana**  
 1Jabu<sub>k</sub> 6SM-OM-appear-APPL-PRS that 1SM-help-PRS 1Fii  
 ‘Jabu<sub>k</sub>, (the evidence) seems to him<sub>k/i</sub> that he is helping Fii.’ *Coreference w/ Obj Allowed*

This is exactly as expected if the ‘raised’ subject in (95b) is in fact left-dislocated, as left-dislocated phrases regularly corefer with object markers.

## 5.4 Summary of -fwaana as a raising verb

In this section we applied the same seven diagnostics from section 4 to the verb -fwaana, and added one final diagnostic in 5.3. These diagnostics consistently showed that agreeing -fwaana raising patterns with -roreka and is indeed an instance of hyper-raising. The ga-fwaana construction, on the other hand, did not show the properties of raising, instead patterning as an instance of left dislocation with expletive agreement. The diagnostics are summarized in the table below:

(96) **Summary: Raising Diagnostics by Construction**

Diagnostic	-roreka		-fwaana		LD Topics
	AGR-	ga-	AGR-	ga-	
Idiomatic reading retained	✓	✓	✓	*	*
Reconstructed reading possible	✓	✓	✓	n/a	n/a
Subject-like extraction	✓	✓	✓	*	n/a
New binding possibilities	✓	✓	✓	*	no
Intermediate in multiple-raising cycle	✓	✓	✓	*	n/a
Can be new information	✓	✓	✓	*	*
Possible inside RC?	✓	✓	✓	*	*
Coreferent with matrix OM	*	*	*	✓	✓

The findings for Logoori -fwaana are relevant in a number of ways. First, the unavailability of non-agreeing raising with -fwaana stands in stark contrast to how non-agreeing raising behaves with -roreka. This is nice confirmation of the viability of the diagnostics as argued by Halpert (2016): in Logoori, within a single language we find surface-similar constructions, one which predictably behaves like left dislocation (-fwaana), and the other which behaves like hyper-raising and crucially *not* like left-dislocation (-roreka), despite the lack of agreement with the fronted subject. This is important validation of one of Halpert’s key findings, that non-agreeing hyper-raising exists (and, as we will see below, additional languages confirm this as well).

That said, as we will discuss below, the particular configuration of raising facts that Logoori presents in fact poses problems for Halpert’s account of the Zulu facts. This complication of the empirical picture promises to move us closer to an explanation for Bantu (hyper-)raising, but it shows that Halpert’s (2016) account can’t stand precisely as formulated: we discuss this in §7 below. Before discussing the theoretical relevance of Logoori, however, we will add some relevant Tiriki patterns into the mix.

## 6 Raising in Tiriki

Tiriki is spoken in Western Kenya, like Logoori.<sup>15</sup> Like the Logoori patterns we considered previously, Tiriki also displays hyper-raising constructions that include both agreeing and non-agreeing raising. Tiriki adds to the empirical complexity by displaying two different sorts of non-agreeing hyper-raising as well: all three of these are illustrated in (98) below. Unraised constructions with the raising verb -lolekha ‘to seem’ are given in (97).

(97) **Unraised**

- a. ka-lolekh-a khuli vaana va-tukh-i.  
 6SM-seem-FV that 2-child 2SM-arrive-FV

<sup>15</sup>The judgments reported here are mainly from Kelvin Alulu, elicited in-person in Nairobi in 2016 and remotely from 2017-present.

b. i-lolekh-a khuli vaana va-tukh-i.  
 9SM-seem-FV that 2-child 2SM-arrive-FV  
 ‘It seems that the children arrived.’

(98) vaana (va-/i-/ka-)lolekh-a khuli va-tukh-i.  
 2-child 2SM-/9SM-/6SM-seem-FV that 2SM-arrive-FV  
 ‘The children seem to have arrived’  
 Lit: ‘The children seem that arrived’

In general, these Tiriki constructions have the properties of hyper-raising: there are demonstrable connectivity effects between the raised subject and the embedded clause, suggesting that these constructions are true instances of syntactic movement (i.e. hyper-raising) and not copy-raising. Likewise, we examine evidence that, for non-agreeing raising, the raised subject has moved to a canonical subject position and is not left-dislocated (relying on various diagnostics for subjecthood and constraints on left-dislocation: §6.2). Finally, we will show for all constructions that this movement has the properties of A-movement rather than A'-movement (lacking reconstruction effects, evidenced by the fact that raising generates Principle C violations: §6.3). All of this evidence shows that Tiriki hyper-raising displays the now-familiar patterns from Zulu and Logoori.

Tiriki does show interesting differences with Logoori, however; for Logoori some apparent hyper-raising was in fact a topic + expletive construction (with *-fwaana*). This is demonstrably different in Tiriki, where the *-fwaana* constructions are hyper-raising constructions. Furthermore, Tiriki has two distinct non-agreeing raising constructions that, rather than being distinguished on any clear syntactic grounds, actually appear to differ mainly in the evidential properties of the different subject markers: we outline these effects in §7.3.2.

## 6.1 Connectivity effects in Tiriki

### 6.1.1 Tiriki full-clause idioms

As is often the case in fieldwork contexts, a challenge for syntactic diagnosis can be finding idioms that are accessible to speakers and which clarify the syntactic distinctions that we are investigating. The best example we have found is the idiom in (99):

(99) imbisi i-hurir-e muriro  
 9-hyena 9SM-feel-FV 3-fire  
 Lit: ‘The hyena has felt the fire’  
 Fig: ‘Someone has eaten too much’

This idiom has a class 9 subject, making it difficult to evaluate the class 9 non-agreeing raising construction. We do show some evidence from other idioms below, but we have found the idiom in (99) to be the most helpful in yielding consistent judgments of the conditions under which the idiomatic reading is lost versus when it is retained, so we begin the discussion from here.<sup>16</sup>

Crucially, the idiom above does not retain its idiomatic reading in control and dislocation environments.

<sup>16</sup>There is a consistent question in evaluating idiom evidence as to when an idiom actually loses its idiomatic reading. While “the cat hopes to be out of the bag” seems to completely lose its idiomatic reading, in English “the cat needs to be out of the bag” can be a creative use of the idiom in a (grammatically) non-idiomatic context to create additional meaning (i.e. the secret needs to come out). This is even more pronounced for some of the idioms below where the subjects of the idioms use less discrete, concrete nouns than *imbisi* ‘hyena.’ In general, a dialogue with consultants clarifies whether the idiomatic readings come naturally or emerge from creative extension of idiomatic interpretations, but this is partly why we rely on multiple forms of idiomatic evidence to argue for our conclusions here, as some of the idioms less reliably lose their idiomatic readings in the expected contexts than other ones do. Because of the strong distinction between the literal meaning and the idiomatic interpretation of the ‘hyena’ idiom in (99) we have found it the easiest for speakers to access their judgments about. But because its class 9 subject doesn’t allow us to easily diagnose class 9 non-agreeing raising, we include other evidence here. The patterns reported here were reliable and persisted through many interviews on these issues, but there was more variability and gradience in speakers’ intuitions about the persistence of idiomatic readings for the other idioms. The ‘hyena’ idiom was not subject to those same challenges.

- (100) imbisi i-cherits-a khu-hurir-e muriro  
 9-hyena 9SM-try-FV 15-feel-FV 3-fire  
 ‘The hyena tried to feel the fire’  
 \*‘Someone tried to overeat’

**Control Construction**

- (101) a. Isaka a-vor-i khuli imbisi i-hurir-e muriro  
 Isaka 1SM-say-FV that 9-hyena 9SM-feel-FV 3-fire  
 ‘Isaka said that the hyena has felt the fire’  
 ‘Isaka said that someone has overeaten’

- b. imbisi, isaka a-vor-i khuli i-hurir-e muriro  
 9-hyena Isaka 1SM-say-FV that 9SM-feel-FV 3-fire  
 ‘The hyena, Isaka said that it has felt the fire’  
 \*Isaka said that somebody has overeaten.

**Left Dislocation Construction**

Likewise, the verb *-manyia* is a plausible copy-raising construction (i.e. non-raising), which requires that its subject be the perceptual source of the reported information. Here, like above, the idiomatic interpretation is lost.

- (102) imbisi i-manyi-a khuli i-hurir-e muriro  
 9-hyena 9SM-show-FV that 9SM-feel-FV 3-fire  
 ‘The hyena is showing that it felt the fire’  
 \*‘Someone is showing that they have overeaten’

We see, then, that this idiomatic construction can be useful for diagnosing whether a phrase is left-dislocated, and whether it retains a strong connectivity with its related lower position (traditionally analyzed as a movement relation as opposed to a control relation or a binding/coreference relationship, as in copy-raising). The idiom in (103), which has the idiomatic reading, ‘things are going badly,’ generally loses its idiomatic reading under certain conditions, such as left-dislocation (104).

- (103) shivala shi-hamb-i muriro  
 7-world 7SM-be.on.fire-FV 3-fire  
 Lit: ‘The world is on fire’  
 Id: ‘Things are going badly’

- (104) a. Ø-suuvir-a khuli shivala shi-hamb-i muriro  
 1s-believe-FV that 7-world 7SM-be.on.fire-FV 3-fire  
 Lit: ‘I believe that the world is on fire.’  
 Id: ‘I believe that everything is going badly.’  
 b. shivala, Ø-suuvir-a khuli shi-hamb-i muriro  
 7-world 1s-believe-FV that 7SM-be.on.fire-FV 3-fire  
 Lit: ‘The world, I believe that (it) is on fire.’  
 Id: %Things are going badly

We annotate the idiomatic interpretation here as % because our consultant has more gradient judgments for this idiom than for the one discussed above - while generally he found the idiomatic reading much less accessible and at times simply absent with left-dislocation, the idiomatic reading was clearly not 100% unrecoverable in the same way that it is with the ‘hyena’ idiom. We generally attribute this to the closer association between the lexical and idiomatic readings for the ‘world on fire’ idiom as opposed to the ‘hyena’ idiom.

And as above, a control construction with this idiom significantly degrades the idiomatic reading.

- (105) shivala shi-cherits-a shi-hamb-i muriro  
 7-world 7SM-try-FV 7SM-be.on.fire-FV 3-fire  
 Lit: ‘The world tried to be on fire’  
 Id: %‘It is being tried to have things go badly’

For the ‘world on fire’ idiom, however, the copy-raising distinction is somewhat more variable: while the idiomatic interpretation is consistently judged to be at least mildly degraded in the expected contexts (and sometimes completely absent), our consultant also finds the idiomatic reading consistently more retrievable with this idiom than with the ‘hyena’ idiom. In the copy-raising construction *-hulikha* ‘sounds like’ in (106), an apparent raising construction in (106b) loses its idiomatic interpretation, instead being restricted to the literal reading.

- (106) a. *ka-hulikh-a khuli i-mbisi i-huriir-e mu-riro*  
 6SM-sound.like-FV COMP 9-hyena 9SM-feel-FV 3-fire  
 ‘It sounds like the hyena has felt the fire.’ (indirect evidence)  
 ‘It sounds like somebody overate.’ (indirect evidence)
- b. *i-mbisi i-hulikh-a khuli i-mbisi i-huriir-e mu-riro*  
 9-hyena 9SM-sound.like-FV COMP 9SM-feel-FV 3-fire  
 ‘The hyena sounds like it has felt the fire.’  
 \* ‘It sounds like somebody overate.’

This is of course additional evidence for the idiom diagnostic as showing variability between raising and non-raising contexts.

The variability based on the idioms involved clearly shows that the availability (or not) of idiomatic readings in these constructions is dependent not only on the properties of the syntactic construction, but also the properties of the idiom itself. The tendency of the ‘world on fire’ idiomatic reading to be more generally accessible in complex syntactic structures is presumably due to the closer connection between the literal and figurative readings of this idiom vs. the ‘hyena’ idiom. Nonetheless, we continue to use the ‘world on fire’ idiom throughout the discussion that follows for several reasons. First, the variability in accessing the idiomatic interpretations in left dislocation, control, and copy-raising never occurs with the hyper-raising constructions, as we show below (suggesting a syntactic difference between raising and those other constructions). Furthermore, the class 7 idiom is useful particularly because the class 7 subject allows agreeing raising and both non-agreeing raising constructions to be distinguished with a single idiom (the other full-clause idioms we have identified have class 9 and class 6 subjects, complicating the task of distinguishing agreeing and non-agreeing raising in each case). As we will show, all the idioms behave consistently in hyper-raising contexts. The class 9 ‘hyena’ idiom is always the most clear instance—it is always judged to unambiguously lose its idiomatic interpretations in copy-raising, control, and left-dislocation, and *never* loses its idiomatic interpretations in hyper-raising contexts. But given the inability to distinguish agreeing raising from non-agreeing (i-) raising with the ‘hyena’ idiom (with its class 9 subject), we focus first on the facts arising from the ‘world on fire’ idiom.

### 6.1.2 Idiomatic interpretations retained in hyper-raising

Crucially, we will see that (in contrast to the control, copy-raising, and left-dislocation constructions shown above) hyper-raising constructions consistently retain the idiomatic interpretation of full-clause idioms. As shown in (107), the idiomatic reading is retained when the subject *shivala* ‘the world’ is fronted past the verb *-lolekha*, with both the class 6 *ka-* and class 9 *i-* subject markers.

- (107) a. *i-/ka-lolekh-a khuli shivala shi-hamb-i muriro*  
 9SM-/6SM-seem-FV that 7-world 7SM-be.on.fire-FV 3-fire  
 Lit: ‘It seems that the world is on fire’  
 Id: ‘It seems like things are going badly’
- b. *shivala (i-/ka)-lolekh-a khuli shi-hamb-i muriro*  
 7-world 9SM-/6SM-seem-FV that 7SM-be.on.fire-FV 3-fire  
 ‘The world seems to be on fire’  
 or ‘Things seem to be going badly’

The fact that the idiomatic reading is retained even in constructions with the non-agreeing *ka-* and *i-* subject markers suggest that these constructions are generated via a movement dependency to a canonical subject position (per standard assumptions). If the raised subject in non-agreeing raising was in fact a left-dislocated subject, we would expect idiomatic readings to be lost. Furthermore, the idiomatic reading is retained when the fronted subject

agrees with the matrix verb (108). This provides evidence against a copy-raising analysis of both agreeing and non-agreeing raising constructions in Tiriki (compare (108) with the copy-raising constructions in (106) above).

- (108) shivala **shi**-lolekh-a khuli shi-hamb-i muriro  
 7-world 7<sub>SM</sub>-seem-FV that 7<sub>SM</sub>-be.on.fire-FV 3-fire  
 ‘The world seems to be on fire’  
 or ‘Things seem to be going badly’

Recall from the Logoori discussion that the *-fwaana* verb systematically behaved differently from the *lolekha*-equivalent. In contrast, in Tiriki, the verb *-fwana* ‘seem/appear’ patterns identically to *-lolekha* in that idiomatic readings are retained for both kinds of non-agreeing raising, giving us reason to believe that these are true hyper-raising constructions.

- (109) a. i-/ka-fwaan-a khuli shivala shi-hamb-i muriro  
 9<sub>SM</sub>-/6<sub>SM</sub>-seem-FV that 7-world 7<sub>SM</sub>-be.on.fire-FV 3-fire  
 ‘It seems that the world is on fire’  
 or ‘It seems like things are going badly’  
 b. shivala i-/ka- fwaan-a khuli shi-hamb-i muriro  
 7-world 9<sub>SM</sub>-/6<sub>SM</sub>-seem-FV that 7<sub>SM</sub>-be.on.fire-FV 3-fire  
 ‘The world seems to be on fire’  
 or ‘Things seem to be going badly’

The availability of the idiomatic reading when the matrix verb agrees with the raised subject *shivala* also helps us to rule out a copy-raising analysis for *-fwana*.

- (110) shivala **shi**-fwaan-a khuli shi-hamb-i muriro  
 7-world 7<sub>SM</sub>-seem-FV that 7<sub>SM</sub>-be.on.fire-FV 3-fire  
 Lit: ‘The world seems to be on fire.’  
 Id: ‘Things seem to be going badly.’

Therefore, in contrast with the Logoori facts, *-lolekha* and *-fwana* both behave as hyper-raising verbs (and critically *not* like copy-raising verbs or control predicates) with both class 6 and class 9 non-agreeing subject markers, as well as with the agreeing subject marker (with regards to the idiom diagnostic). The same patterns arise with other full-clause idioms. In the interest of brevity, we will not include the full paradigms for both verbs for the remaining idioms, but (111) gives examples of non-agreeing raising for an idiom with a class 6 subject (*mang’ana* ‘words’) and one with a class 9 subject (*imbisi* ‘hyena’).

- (111) a. imbisi **ka**-lolekh/fwan-a khuli i-hurir-e muriro  
 9-hyena 6<sub>SM</sub>-seem/seem-FV that 9<sub>SM</sub>-feel-FV 3-fire  
 Literally: ‘The hyena seems to have felt the fire’  
 ‘Someone seems to have overeaten’  
 b. mang’ana **i**-lolekh/fwan-a khuli ka-rhavak-e  
 6-word 9<sub>SM</sub>-seem/seem-FV that 6<sub>SM</sub>-bubble-FV  
 Literally: ‘The words seem to have bubbled’  
 ‘The secret seems to have been revealed’

In every instance we have examined, in Tiriki the *-lolekha* and *-fwaana* predicates behave the same with respect to hyper-raising. The basic documentation presented here is useful for showing the contrast with Logoori (where *-roreka* and *-fwaana* behave differently), but for what remains we will only show evidence for *-lolekha* for the sake of space.

Another relevant diagnostic is the contrast in the perceptual source reading in hyper-raising constructions vs. clear copy-raising constructions; recall from above that copy-raising constructions require the matrix subject to be the speaker’s perceptual source, whereas a (hyper-)raising construction does not (Carstens and Diercks 2013b

for Lubukusu, and the preceding discussion on Logoori). The pseudo-expletive agreements in non-agreeing raising are a significant confounding factor for evaluating reconstructed readings, making it less useful as an unambiguous diagnostic for copy-raising in Tiriki.

The idiom evidence alone, however, argues strongly that these hyper-raising constructions are not copy-raising or control constructions, and are instead derived via a movement dependency (since they retain their idiomatic interpretations under raising). We conclude that Tiriki hyper-raising shows the properties of raising proper (i.e. derived via movement) and *not* properties of control or copy-raising.

## 6.2 Position of the raised subject

As discussed in the preceding chapter about Logoori, non-agreeing raising constructions have at least two possible derivations—one where the raised subject is in canonical subject position (broadly assumed to be Spec,TP) and one where an expletive is in subject position and the subject is left dislocated. As we will see, raised subjects (even in non-agreeing raising) behave as if they are canonical subjects, lacking the properties of left-dislocated phrases.

### 6.2.1 Topic readings

In Tiriki (like Logoori), material that is topicalized via left-dislocation must already be established in the discourse: left-dislocated phrases must be discourse-old or familiar information. For instance, a left-dislocated topic like *vaana yavo* ‘those children’ in (112) cannot serve as an answer to a question.

(112) Q: Wiina ne w-a Isaka a-lor-i?  
 1-who FOC 1AGR-a Isaka 1SM-see-FV  
 ‘Who did Isaka see?’

A: #vaana yavo, Isaka a-va-lor-i  
 2-child 2-DEM Isaka 1SM-2OM-see-FV  
 ‘Those children, Isaka saw them’

In the raising constructions under consideration here, on the other hand, ‘raised’ subjects may readily constitute previously unknown information. For instance, the raised DP may serve as the answer to a question, as shown in example (113) with the verb *-lolekha*.

(113) Wiina ne a-tukh-i?  
 1-who FOC 1SM-arrive-FV  
 ‘Who arrived?’

a. i-/ka-lolekh-a khuli **vaana** (ne) va-tukh-i  
 9SM-/6SM-seem-FV that 2-child (FOC) 2SM-arrive-FV  
 ‘It seems that the children arrived’

b. **vaana** (ne) (va-/i-/ka-) lolekh-a khuli va-tukh-i  
 2-child (FOC) 2SM-/9SM-/6SM-seem-FV that 2SM-arrive-FV  
 ‘The children seem to have arrived’

In each of the preceding answers a cleft is perhaps the most natural way to answer the question, a structure that would be realized with the ‘ne’ focus morpheme (represented optionally in the examples above). But non-clefted declarative sentences are perfectly acceptable answers to the question above as well. As can be seen in (113), the raising constructions can serve as answers to the question regardless of which subject marker appears on the verb, indicating that in all three constructions the raised subject does not behave as if it is left-dislocated. This is evidence (following Halpert’s conclusions) that even non-agreeing raising is in fact raising-to-subject (and is not a left-dislocation + expletive construction). Although some interpretational differences arise when different subject markers are used, all of the examples in (113) are acceptable Tiriki sentences.

The fact that the idioms in the preceding section retain their idiomatic readings in non-agreeing as well as agreeing raising constructions provides further evidence against a left-dislocation analysis. As shown previously, idiomatic readings are not retained when the subject of a full-clause idiom is left-dislocated:



- (114) a. Isaka a-vor-i khuli imbisi i-hurir-e muriro  
 Isaka 1SM-say-FV that 9-hyena 9SM-feel-FV 3-fire  
 ‘Isaka said that the hyena has felt the fire’  
 ‘Isaka said that someone has overeaten’
- b. imbisi, Isaka a-vor-i khuli i-hurir-e muriro  
 9-hyena Isaka 1SM-say-FV that 9SM-feel-FV 3-fire  
 ‘The hyena, Isaka said that it has felt the fire’  
 \*Isaka said that somebody overate.

Thus, the idioms given in the preceding section also offer evidence that Tiriki hyper-raising is not simply left-dislocation (with an expletive occupying the subject position, in the case of non-agreeing raising, like the Logoori *ga-fwaana* construction).

### 6.2.2 Raising with quantified phrases

As discussed by Erteschik-Shir (2007), some quantified phrases resist topicalization. The modifier *-ti* ‘few’ is one of these in Tiriki. (115a) shows a left dislocated object, but a parallel construction where the left dislocated object is modified by *-ti* ‘few’ is unacceptable.

- (115) a. Shitapu yesho, Ø-som-i  
 7-book 7-DEM 1s-read-FV  
 ‘That book, I read.’
- b. \*?Vitapu viti, Ø-som-i  
 8-book 8-few 1s-read-FV  
 ‘Few books, I read.’

Notably, the quantifier *-ti* ‘few’ is allowed in both agreeing and non-agreeing raising constructions, providing further evidence that the raised subject in Tiriki hyper-raising constructions (including non-agreeing raising constructions) are not left-dislocated topics.

- (116) a.  $\overline{I/Ka}$  lolekhan-a khuli vitapu viti vi-somw-i  
 9SM/6SM-seem-FV that 8-book 8-few 8SM-read.PASS-FV  
 ‘It seems that few books were read.’
- b. Vitapu viti  $\overline{vi-i/ka}$  lolekhan-a khuli vi-somw-i  
 8-book 8-few 8SM/9SM/6SM-seem-FV that 8SM-read.PASS-FV  
 ‘Few books seem to have been read.’

### 6.2.3 Cleft constructions and questions

Clefts provide another helpful tool for determining if raised material is behaving like a subject, as subject and non-subject clefts in Tiriki behave differently. Specifically, non-subjects in cleft constructions are followed by a particle *AGR-a*, which agrees with the clefted DP, while subject clefts necessarily omit this agreeing particle. The basic Tiriki cleft structure is given in (117).

- (117) **Subject cleft:**  $[_{CP} \text{SUBJ}_k \text{ (ne)} [_{TP} t_k \text{ V OBJ} ]$   
**Non-subject cleft:**  $[_{CP} \text{OBJ}_k \text{ (ne)} \text{AGR-}a [_{TP} \text{SUBJ V } t_k ]$

In a subject cleft, as in (118b), the *AGR-a* particle cannot appear after the subject. However, it is obligatory after the clefted object in (118c)

- (118) a. Lung’aho a-lol-i tsinzukha  
 Lung’aho 1SM-see-FV 10-snake  
 ‘Lung’aho saw the snakes’

- b. Lung'aho ne (\*w-a) a-lol-i tsinzukha  
 Lung'aho FOC (\*1-a) 1SM-see-FV 10-snake  
 'It is Lung'aho who saw the snakes'
- c. Ni tsinzukha ne \*(tsy-a) Lung'aho a-lol-i  
 PRES 10-snake FOC \*(10-a) Lung'aho 1SM-see-FV  
 'It is the snakes Lung'aho saw' (There were many things, but Lung'aho specifically saw the snakes)

When raised subjects appear in a cleft construction with subject agreement on *-lolekha*, they behave just as we would expect them to in the subject position of the matrix clause. As shown in (119), the *AGR-a* particle is prohibited in the cleft construction.

- (119) Ni vaana ne (\*v-a) va-lolekh-a va-tukh-i  
 PRES 2-child FOC (\*2-a) 2SM-seem-FV 2SM-arrive-FV  
 'It is the children who seem to have arrived'

Non-agreeing raising, however, behaves differently in cleft constructions. When either the class 6 or class 9 subject marker appears on *-lolekha* in a cleft, the *AGR-a* particle is optional with the raised subject.

- (120) Ni vaana ne (v-a) i-/ka- lolekh-a va-tukh-i  
 COP 2-child FOC (2-a) 9SM/6SM-seem-FV 2SM-arrive-FV  
 'It is the children who seem to have arrived.'

This is surprising, considering that raised material behaves subject-like in both agreeing and non-agreeing raising constructions by many diagnostics. Yet, this phenomenon is easily explained if we take into account the possible positions from which the raised 'subject' could have moved in (120). As shown in (121), the subject DP *vaana* 'the children' may move into the cleft from Position 1 (labeled POS1) after raising into subject position<sup>17</sup> from the embedded clause.

- (121) Ni vaana ne (AGR-a) POS1 ka-/i-fwaana [<sub>CP</sub> khuli POS2 vatukhi ]

Since non-agreeing raising is attested in Tiriki with both class 6 and class 9 subject markers, it is entirely possible for the agreement patterns to surface from such a derivation. Alternatively, the subject could potentially have raised all the way from Position 2 (POS2), in the embedded CP, as illustrated in (122).

- (122) Lung'aho<sub>k</sub> ne w-a Anangwe a-vol-i t<sub>k</sub> a-lol-i tsinzukha  
 Lung'aho FOC \*1-a 1Anangwe 1SM-say-PST 1SM-see-FV 10-snake  
 'It is Lung'aho who Anange said saw the snakes'

If the DP in the cleft is extracted from matrix subject position, it would be expected to behave subject-like, but if it moved directly from the embedded CP, we should expect non-subject-like behavior. Thus, we posit that the derivational ambiguity of the construction leads to the optionality of *AGR-a* in the non-agreeing raising versions. Such ambiguity does not arise in the agreeing raising versions of the clefts, as such agreement would not result if the subject DP moved from Position 2; therefore, Position 1 is the only possible position of origin and *AGR-a* cannot appear in the construction.

Question clefts in Tiriki behave the same way, as this hypothesis would predict. In (123), it is shown that the raised *wh*-phrase behaves subject-like in an agreeing raising construction, prohibiting the presence of *AGR-a*. In a non-agreeing construction with either *ka-* or *i-*, however, *AGR-a* is once again optional.

- (123) Wiina ne (\*w-a) a-/i-/ka-lolekh-a khuli a-tukh-i?  
 1-who FOC (\*1AGR-a) 1SM-/9SM/6SM-seem-FV that 1SM-arrive-FV  
 'Who is it that seems to have arrived?'

<sup>17</sup>We elaborate the structural position(s) of subjects in Tiriki in greater depth later on in our analysis.

The analysis for the previous cleft constructions holds here as well: the structural ambiguity of the cleft results in the optionality of AGR-*a* with the non-agreeing raising constructions, as they permit such ambiguity, whereas the raised subject in an agreeing construction has only one possible position of origin (matrix subject position). We therefore conclude that all hyper-raising constructions consist of movement to the canonical matrix subject position, as raised subjects have canonical subject properties. This conclusion rests on the fact that subject-like extraction is possible for all raising constructions (and required for some). This would not be possible if the purportedly raised subjects were not in fact subjects. The possibility of non-subject patterns requires explanation (which we have posited as a structural ambiguity of extracting from a lower position), but the mere availability of subject-like patterns is evidence of the raised subjects behaving as canonical subjects.

#### 6.2.4 Raising inside relative clauses

Another distinction between non-agreeing hyper-raising and left-dislocating a topic is the availability of the construction inside of a relative clause. Example (124b) shows a left-dislocated topic construction in Tiriki. As shown in (125), this construction is not permitted within a relative clause.

- (124) a. mwaana wanje a-yanz-i vu-shuma  
 1-child 1-POSS 1SM-like-FV 14-ugali  
 ‘My child liked ugali (a while ago)’  
 b. vu-shuma, mwaana wanje a-vu-yanz-i  
 14-ugali 1-child 1-POSS 1SM-14OM-like-FV  
 ‘Ugali, my child liked it’
- (125) a. ndz-itsurir-aang-a matukhu k-a mwaana wanje y-a-yanz-a vu-shuma  
 1S-remember-IPFV-FV 6-day 6-a 1-child 1-POSS 1SM-PST-like-FV 14-ugali  
 ‘I remember the days when my son liked ugali’  
 b. \*? ndz-itsurir-aang-a matuku k-a vu-shuma, mwaana wanje y-a-vu-yanz-a  
 1S-remember-IPFV-FV 6-day 6-a 14-ugali 1-child 1-POSS 1SM-PST-14OM-like-FV  
 \*‘I remember the days when ugali, my son liked it’

In contrast, agreeing raising and both types of non-agreeing raising are all permissible within a relative clause, as illustrated in (126) (and the *-fwana* construction shares the same properties).

- (126) a. ndz-itsurir-a matukhu k-a ka-lolekh-a khuli mwaana wanje y-a-yanz-a vu-shuma  
 1S-remember-FV 6-day 6-a 6SM-seem-FV that 1-child 1-POSS 1SM-PST-like-FV 14-ugali  
 ‘I remember the days when it seemed that my child liked ugali’  
 b. ndz-itsurir-a matukhu k-a mwaana wanje a-/i-/ka- lolekh-a khuli y-a-yanz-a vu-shuma  
 1S-remember-FV 6-day 6-a 1-child 1-POSS 1SM/9SM/6SM-seem-FV that 1SM-PST-like-FV 14-ugali

This evidence strongly suggests that raised subjects in Tiriki occupy the canonical matrix subject position and are not left-dislocated topics. This is an especially critical conclusion for the non-agreeing raising construction, because the typical Bantu agreement pattern is for the subject marker to Agree with a phrase in its specifier (Collins, 2004; Carstens, 2005; Baker, 2008). The Tiriki (and Logoori) conclusions represent the first confirmations of Halpert’s findings regarding the existence of non-agreeing raising in Zulu as true raising generated via movement as opposed to a left dislocation + expletive construction. As we will see, however, extending her analysis to Luyia proves problematic as Tiriki diverges from Zulu in other critical respects.

### 6.3 Tiriki hyper-raising is A-movement, not A'-movement

To this point our consideration of the three raising constructions in Tiriki has focused on whether the purportedly raised subject is in fact a true subject (a question that is especially crucial for non-agreeing raising, where the answer is not surface-transparent). Our investigation has focused on structural questions to this point; this section considers whether the raised subject moves via A-movement or A'-movement, concluding that (even in non-agreeing raising) the movement is an A-movement. This serves as yet further evidence that Tiriki hyper-raising constructions (both agreeing and non-agreeing raising) are true raising constructions, generated via A-movement to a canonical subject position.

### 6.3.1 Binding Principle C

As discussed above, A-movement creates new binding possibilities, while A'-movement does not: we apply the same diagnostic as we did for Logoori (based on the configuration used by Halpert) to show that hyper-raising in Tiriki requires A-movement. As shown in the unraised constructions in (127), the R-expression *Anangwe* can be coreferent with the embedded pronominal subject because *Anangwe* is not in a position in which it c-commands the embedded subject. This is true whether the class 6 or the class 9 subject marker appears on the matrix verb, *-lolekha* in this case.

- (127) a. **ka**-lolekhan-a khuli khu vuhani vw-a Anangwe<sub>k</sub> pro<sub>i/k</sub> a-khony-a varina veve  
 6SM-seem-FV that CL17 14-generosity 14-a Anangwe 1SM-help-FV 2-friend 2-POSS
- b. **i**-lolekhan-a khuli khu vuhani vw-a Anangwe<sub>k</sub> pro<sub>i/k</sub> a-khony-a varina veve  
 9SM-seem-FV that CL17 14-generosity 14-a Anangwe 1SM-help-FV 2-friend 2-POSS  
 'It seems that in Anangwe's<sub>k</sub> generosity he<sub>i/k</sub> is helping his friends'  
 ✓ coreference between *pro* and *Anangwe*

All three raising constructions (agreeing, non-agreeing *ka*-, and non-agreeing *i*-) are also possible with *-lolekha*. However, coreference between *Anangwe* and the raised subject DP is impossible in every instance, indicating that the subject has undergone A-movement. We use an overt pronoun for the raised subject here to distinguish between the raised and unraised construction (i.e. non-agreeing raising is indistinguishable from non-raising if the raised subject is null).

- (128) ye<sub>i/\*k</sub> **a-/i-/ka**-lolekhan-a khuli khu-vuhani vw-a Anangwe<sub>k</sub> a-khony-a varina veve  
 s/he 6SM-seem-FV that AUG-14-generosity 14-a Anangwe 1SM-help-FV 2-friend 2-POSS  
 'He<sub>i/\*k</sub> seems in Anangwe's<sub>k</sub> generosity to be helping his friends'  
 \*coreference between *ye* and *Anangwe*

Again, *-fwana* shows all the same behaviors. Therefore, in raising constructions involving the verbs *-lolekha* and *-fwana*, it appears that the raised subjects have undergone A-movement out of the embedded clause, as is the case in both Logoori and Zulu.

### 6.3.2 Cyclic raising

As Halpert showed for Zulu and as we showed above for Logoori, a potential improper movement configuration is useful for showing that non-agreeing hyper-raising is in fact A-movement to subject position. The Ban on Improper Movement creates the expectation that A'-movement cannot feed A-movement; we saw above that non-agreeing raising with *-roreka* in Logoori can feed agreeing raising in the main clause, suggesting that non-agreeing raising in Logoori is in fact A-movement. In contrast, apparent *ga*-raising construction with *-fwaana* in Logoori consistently shows properties of a left dislocation construction: accordingly, the *ga-fwaana* construction cannot feed agreeing raising in the main clause.

As was the case for the Logoori *-roreka* construction, cyclic raising in Tiriki suggests that non-agreeing raising constructions are hyper-raising (and not left dislocation) as the embedded DP *shivala* 'the world' is able to raise out of its complement clause and then again past the verb *-volekha* 'to be said.' Furthermore, *shivala* is the subject of a sentential idiom that maintains its idiomatic reading even after it has raised past both verbs, indicating that A'-movement has not occurred in either step. While these generalizations hold whether the agreeing subject marker (in raised versions) or either non-agreeing marker (*i*- or *ka*-) appears on *-volekha*, we include just the instances of agreeing raising in the matrix predicate for brevity.

- (129) a. **ka**-volekh-a khuli i-/ka-lolekha **shivala** shi-hamb-i muriro  
 6SM-be.said-FV that 9SM/6SM-seem-FV 7-world 7SM-be.on.fire-FV 3-fire  
 'It is said that it seems that the world is on fire'  
 or 'It is said that it seems that everything is going badly'

- b. **shivala** shi-volekh-a khuli (i-/ka-) lolekh-a shi-hamb-i muriro  
 7-world 7<sub>SM</sub>-be.said-FV that 9<sub>SM</sub>/6<sub>SM</sub>-seem-FV 7<sub>SM</sub>-be.on.fire-FV 3-fire  
 ‘The world is said that it seems to be on fire’  
*Idiomatic reading retained*

The same pattern holds for *-fwana*. We can see that raised DPs in Tiriki do not behave like left-dislocated topics for either agreeing or non-agreeing hyper-raising constructions. Rather, raised DPs undergo A-movement out of the embedded CP to matrix subject position.

## 6.4 Intermediate summary: Tiriki raising

The conclusions for Tiriki mirror those for Zulu and Logoori hyper-raising: raising constructions in Tiriki show properties of A-movement to matrix subject position, despite that movement coming out of a finite embedded clause. The table in (130) summarizes the results of the diagnostics that led us to these conclusions. Tiriki also introduced a new element to the puzzle, however: Tiriki has multiple non-agreeing subject markers, linked with different evidential readings: the theoretical relevance of both the confirmatory evidence and the novel patterns is discussed in §7.

### (130) Summary: Raising Diagnostics by Construction

Diagnostic	-lolekha			-fwana			LD Topics
	AGR-	ka-	i-	AGR-	ka-	i-	
Idiomatic reading retained	✓	✓	✓	✓	✓	✓	*
Fronted DP can be new information	✓	✓	✓	✓	✓	✓	*
Fronted quantified DP	✓	✓	✓	✓	✓	✓	*
Cleft constructions: AGR- <i>a</i> ?	*	opt	opt	*	opt	opt	n/a
Possible inside RC?	✓	✓	✓	✓	✓	✓	*
Principle C: coreference?	*	*	*	*	*	*	n/a
Cyclic raising	✓	✓	✓	✓	✓	✓	*

## 7 Discussion of theoretical relevance

In this section we comment on the theoretical relevance of the hyper-raising constructions discussed in this paper. Raising constructions have played a relatively large role in theorizing within mainstream generative grammar, including in its current iteration, the Minimalist Program (Chomsky, 2000, 2001). Therefore, the robust availability of hyper-raising constructions poses challenges to a range of core theoretical constructs. We discuss the main relevant points here, especially focusing on the ways that Luyia is (and is not) amenable to an analysis along the lines of that proposed by Halpert for Zulu.

### 7.1 Halpert’s (2018) account of Zulu hyper-raising

There are a handful of works dealing with the properties of hyper-raising in Bantu languages to some extent (Harford Perez, 1985; Diercks, 2012; Carstens and Diercks, 2013b; Halpert, 2019; Gluckman, 2021). Here, we deal with the most thorough work, and also the only one that gives a comprehensive treatment of both agreeing and non-agreeing hyper-raising.<sup>18</sup>

Zulu shows very similar patterns to both Logoori and Tiriki. The only surface difference between Zulu and Tiriki/Logoori is the use of class 17 in Zulu non-agreeing raising and the use of classes 9 and 6 in the Luyia varieties considered here.

- (131) uZinhle<sub>k</sub> ku-bonakala [ukuthi *t<sub>k</sub>* u-zo-xova ujeqe] [Zulu]  
 AUG.1Zinhle<sub>k</sub> 17<sub>SM</sub>-seems that 1<sub>SM</sub>-FUT-make AUG.1steamed.bread  
 ‘It seems that Zinhle will make steamed bread.’ (Halpert, 2015)

<sup>18</sup>Gluckman (2021) is highly relevant, but mainly deals with the expletive-like agreement forms specifically, only referencing hyper-raising to a limited extent.

Halpert challenges the idea that English-like raising is the ‘typical’ pattern and that the raising patterns found in Zulu and other Bantu languages are extraordinary and require special explanation. The well-established pattern in English and other Western languages (which, like many things, has played an outsized role in syntactic theory) is that subjects must raise out of non-finite complement clauses, and cannot raise out of finite complement clauses. As we mentioned in §1, the usual explanation for this relies on Case assignment as a motivating factor for raising out of non-finite clauses, and the Phase Impenetrability Condition and the Activity Condition as factors that work against raising out of finite clauses. Infinitival complement clauses are not phases on the standard account (Chomsky, 2001), thus the matrix T can probe inside them and raise the embedded subject, which is Case-licensed by matrix T. CP complements, on the other hand, are phases, and thus material inside them is unavailable for further operations (such as the embedded subject, which is itself Case-licensed by embedded T).

In contrast, Halpert (2018) uses  $\varphi$ -features and the EPP (rather than Case, Activity, and the PIC, Phase Impenetrability Condition) to motivate and explain raising. She claims that the effects attributed to the PIC can actually be explained by CPs themselves bearing  $\varphi$ -features. In a typical Agree relation, the probe will find the structurally closest goal that matches in features. While this is often a DP, if a CP has phi-features, on Halpert’s account the CP itself can act as a goal. Specifically, Halpert argues that English finite clauses have phi-features and can thus be goals for T, as shown by the ability to use a finite CP as a subject in (132).

- (132) That the world is round seems likely. **CP Subject Acceptable**  
 (133) \*The world to be round seems likely. **Inf Subject Unacceptable**

As (133) shows, however, a non-finite clause cannot act as a subject in English, because it is not a phi-goal. Thus, (134) is ungrammatical not because T can’t probe inside a phase, but because T can’t probe past the available CP phi-goal to find the embedded subject. The grammatical (135) poses no such problem, since the non-finite clause does not have phi-features (and not because it is not a phase, which is the typical explanation).

- (134) \*The world seems likely [<sub>CP</sub> that \_\_\_ is round ] . **Raising from Finite Clause Unacceptable**  
 (135) The world seems likely \_\_\_ to be round. **Raising from Finite Clause Acceptable**

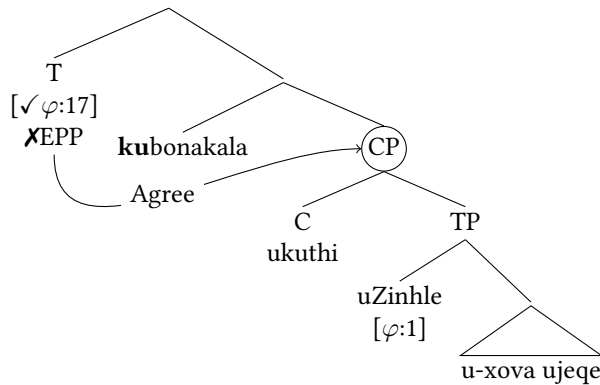
While using phi-features rather than the PIC may seem inconsequential, it proves to be very important when considering how the EPP can be satisfied in a language, the other piece to Halpert’s theory. Zulu finite clauses have phi-features, just as in English, shown by the object agreement with the CP in (136).

- (136) *ngi-ya-ku-cabanga* [ *ukuthi uMlungisi u-ya-bhukuda u-manje* ] **[Zulu]**  
 1SG.SM-YA-17OM-think that AUG.1Mlungisi 1SM-YA-swim now  
 ‘I think that Mlungisi is swimming now.’ (Halpert, 2015)

However, unlike English, Halpert shows that Zulu finite clauses cannot fulfill the EPP (i.e., they cannot be subjects). Halpert argues that T still finds and agrees with the embedded CP when it probes, but because CP cannot satisfy the EPP on T, the EPP quality of T remains unsatisfied. This first step in deriving the raising constructions in (137) is illustrated in (138).

- (137) a. *uZinhle<sub>i</sub> ku-bonakala* [ *ukuthi t<sub>i</sub> u-zo-xova ujeqe* ] **[Zulu]**  
 AUG.1Zinhle<sub>i</sub> 17S-seems that t<sub>i</sub> 1S-FUT-make AUG.1steamed.bread  
 ‘It seems that Zinhle will make steamed bread.’ (Halpert, 2015)  
 b. *uZinhle<sub>i</sub> u-bonakala* [ *ukuthi t<sub>i</sub> u-zo-xova ujeqe* ] **[Zulu]**  
 AUG.1Zinhle<sub>i</sub> 1S-seems that t<sub>i</sub> 1S-FUT-make AUG.1steamed.bread  
 ‘It seems that Zinhle will make steamed bread.’ (Halpert, 2015)

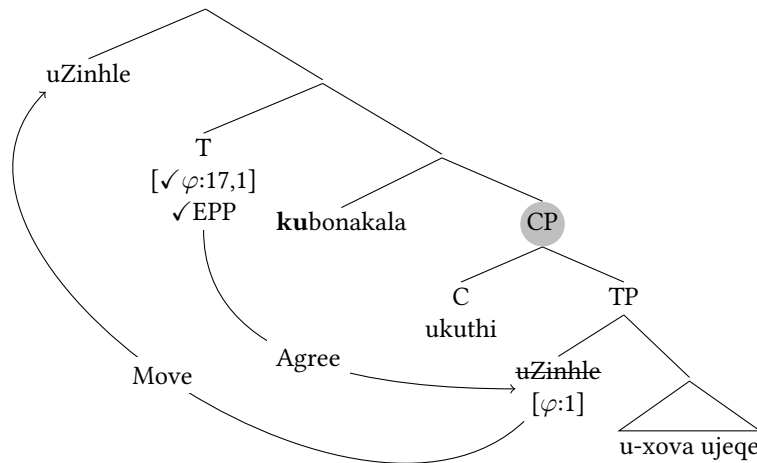
- (138) **Step 1 hyper-raising-to-subject: T agrees with embedded CP, CP cannot satisfy EPP on T** (Halpert, 2019, 143)



At this point in the derivation, T has acquired class agreement (gender and number features), but needs to probe a second time for something to satisfy the EPP. Initially, T could not probe for the embedded subject because the CP intervened as a phi-goal. Halpert relies on Rackowski and Richards (2005), however, to claim that this intervention effect is obviated after the initial agreement. In other words, when T probes a second time, rather than agreeing again with the CP, it can now look inside the CP and find the embedded subject. There is a second instance of Agree, and the subject is raised to satisfy the EPP, since Zulu DPs *can* satisfy the EPP, unlike finite clauses.

Because T has agreed twice, the subject agreement that surfaces can match either the raised subject (from the second instance of Agree), or the entire embedded CP (from the first instance), which in Zulu gives class 17 agreement. This second step is illustrated in (139), which shows that either subject agreement marker is possible.

- (139) **Step 2 in hyper-raising-to-subject: T agrees with and fronts embedded subject** (Halpert, 2019, 143)



Thus, the non-agreeing raising construction, rather than merely being a curiosity, results from the initial agreement with CP that allows T to get around the apparent ‘phase’ effects (which Halpert explains with phi-features) and raise the embedded subject. Importantly, this CP agreement occurs in both agreeing and non-agreeing raising – the difference is only in which class agreement ends up being morphologically realized on matrix T, which Halpert attributes to a morphological choice between the two options, as matrix T bears  $\varphi$ -features for both the CP complement and the embedded/raised subject.

In contrast, infinitival clauses *can* satisfy the EPP in Zulu, so T never needs to probe a second time inside of one. T can get phi-features and satisfy the EPP all in one go, explaining the restriction on raising out of such phrases. Rather than probing again to find and raise the embedded subject, non-finite clauses themselves can act as subjects.

To recap, Halpert replaces the PIC with facts about the featural status of phrases that we identify as phases. What we call phases in English are impenetrable because they have phi-features, which blocks T from probing inside them. However, not every phi-goal can satisfy the EPP in any given language, so T may be forced to probe a second time after an initial agreement with a clause. This initial agreement obviates intervention effects of the clausal phi-goal, allowing T to probe inside and raise the embedded subject, resulting in so-called ‘hyper’-raising.

The Zulu and English raising patterns contrast because of differences in phi-features and the EPP: non-finite clauses in Zulu have phi-features, whereas they do not in English (finite clauses have phi-features in both), and CPs can satisfy the EPP in English, while they cannot in Zulu.

## 7.2 Implications of Logoori non-agreeing *ga-fwaana*

One of the key findings about Logoori is that not all instances of hyper-raising in Logoori show the non-agreeing form. The systematic distinction between *ga-fwaana* topicalization constructions and the three raising constructions (agreeing *-fwaana*, and agreeing and non-agreeing *-roreka*) helps support the conclusion that hyper-raising exists in Logoori, and particularly that the non-agreeing *ga-roreka* constructions are examples of raising to subject despite the lack of (overt) agreement with the raised subject.

While the Logoori diagnostics have clearly showed that *ga-roreka* constructions behave like typical A-movement-based raising, the comparison to *ga-fwaana* reinforces the fact that subjects of *ga-roreka* do not behave like left-dislocated topics, and are in fact real subjects. By showing what dislocation looks like in a near-identical context, and that it clearly contrasts with the raising constructions, *ga-fwaana* helps confirm the findings of Zeller (2006), Halpert (2016), Diercks (2012), and Carstens and Diercks (2013b) that (hyper-)raising out of finite clauses exists in Bantu languages. Halpert (2016, 2018) in particular is supported in her conclusion that non-agreeing raising exists and is proper hyper-raising despite the lack of subject agreement.

The lack of non-agreeing raising with *-fwaana* does, however, challenge Halpert’s theory of raising. On Halpert’s approach, all instances of hyper-raising ought to be the result of Agree with the complement clause CP, which itself is unable to satisfy the EPP on T, inducing an additional Agree operation that targets the embedded subject. Presumably it would be possible for a language to contain this process but not display CP features overtly on matrix T (e.g. if CP features didn’t have morphological forms for subject markers), but Logoori is clearly not such a language: non-agreeing raising is possible with *-roreka*, using the class 6 subject marker on the matrix verb (on Halpert’s approach, this would suggest that CP complement clauses in Logoori are class 6).

Agreeing hyper-raising is only able to occur, according to Halpert, after the main clause T first agrees with the CP, obviating the intervention effects caused by the CP being a  $\varphi$ -goal. It is this initial agreement with the CP that allows T to probe inside the clause and raise the embedded subject to fulfill the EPP. That makes the availability of agreeing raising with *-fwaana* surprising, given the *lack* of non-agreeing raising with the same predicate. On Halpert’s approach, we would expect agreeing and non-agreeing raising to occur with

The only way around this in Halpert’s model is to suggest that the embedded finite phrase in *-fwaana* sentences does not actually have  $\varphi$ -features, and is thus transparent to probing, like English non-finite clauses. This would allow T to find the embedded subject with its first probe in an agreeing *-fwaana* construction. We have as of yet been unable to find independent evidence of Logoori CPs controlling agreement, however, which is a complicating factor.

The problem with this solution, however, lies in the fact that *-roreka* *does* have non-agreeing raising, and the two verbs select for identical embedded clauses, as seen in (140):

- (140) a. *ga-roreka* [ *ndi i-mbwa i-rum-i ri-juungu* ]  
           6SM-seems that 9-dog 9SM-bit-PST 5-rat  
           ‘It seems that the dog bit the rat.’  
       b. *ga-fwaana* [ *ndi i-mbwa i-rum-i ri-juungu* ]  
           6SM-appears that 9-dog 9SM-bit-PST 5-rat  
           ‘It appears that the dog bit the rat.’

Either finite clauses in Logoori *do* have  $\varphi$ -features, as in Zulu, which would leave us the mystery of why there is no non-agreeing raising with *-fwaana*, or finite clauses *do not* have  $\varphi$ -features, which would leave us needing to explain



where non-agreeing raising with *-roreka* comes from. Halpert’s theory does not leave room for the pattern seen in Logoori where some instances of hyper-raising (*-roreka*) are accompanied by a choice in subject agreement, while others (*-fwaana*) are not.

The one way for Halpert’s theory to apply unchanged to Logoori is to claim that the two raising predicates select for different types of CPs. The *-roreka* CP would be like finite clauses in Zulu – having  $\varphi$ -features but unable to satisfy the EPP – while the *-fwaana* CP would not have  $\varphi$ -features. This explanation seems unlikely on the basis of Logoori alone, however, there is no obvious reason outside of the raising facts why they should be different, and as shown above, the CPs for these verbs are identical on the surface and don’t show any other syntactic differences that we are aware of. It is on this point that Tiriki offers potential insights.

### 7.3 Theoretical relevance of Tiriki raising: evidential properties

As we alluded to earlier, there is an interpretive distinction in Tiriki between class 6 and class 9 matrix subject markers in contexts like those investigated in this paper. There is existing analysis of a similar pattern in a distinct variety of Logoori than we investigate in this paper, which we outline briefly here before revisiting Tiriki.

#### 7.3.1 Expletives in expletive-rich Logoori

Gluckman and Bowler (2017) describe a pattern that is novel to the cross-linguistic literature on expletives, and which is central to our discussion here because components of their empirical description and analysis are directly applicable to the Wanga and Tiriki hyper-raising patterns that we report here. In the variety of Logoori described by Gluckman and Bowler, expletive agreement may occur in either class 6 or class 9 in otherwise identical grammatical contexts:

- (141) a. e-ror-ek-a ndee Sira a-gw-ε  
 9-look-AC-FV that 1Sira 1-fall-FV  
 ‘It looks like Sira fell.’  
 b. ga-ror-ek-a ndee Sira a-gw-ε  
 6-look-AC-FV that 1Sira 1-fall-FV  
 ‘It looks like Sira fell.’

Somewhat ironically, the main Logoori consultant for this current volume does *not* share the patterns that Gluckman and Bowler report for Logoori, but our Tiriki consultant has parallel structures robustly.<sup>19</sup> For lack of a better designation, we will describe the variety of Logoori reported by Gluckman and Bowler (2017) as *expletive-rich* Logoori.<sup>20</sup>

We don’t summarize the full range of use of these expletive agreements in expletive-rich Logoori, instead simply noting a major pattern. With perception verbs, choice of expletive correlates to directness of evidence that the speaker has for the reported information. The class 6 expletive conveys that the speaker directly perceived the event, whereas the class 9 expletive communicates that the speaker’s evidence is indirect. So in a situation like (142) where the speaker hasn’t directly observed Imali’s physical appearance, using the class 9 expletive is natural and using class 6 is infelicitous:

- (142) a. *Context: It’s flu season, and Imali didn’t come to school. The speaker says:*  
 e-fan-a kuresa Imali a-saal-a  
 9-seem-FV like 1Imali 1-be.sick-FV  
 ‘It seems like Imali is sick’

<sup>19</sup>This kind of variation is quite common in Luyia, where speakers of a single language may not share grammatical patterns which are nonetheless shared with a subset of speakers of another related language.

<sup>20</sup>Using a descriptive term is valuable for mnemonic purposes, but we also want to be clear not to designate this as a particular “dialect” of Logoori by any usual sociolinguistic metrics, restricting our discussion to the expletive properties of that Logoori variety. For example, the Logoori speaker who provided data for Gluckman and Bowler’s (2017) expletive study (obviously) has these expletive patterns, but his own father doesn’t (Gluckman and Bowler, pc). One might think this is therefore a generational change, but in fact Gluckman and Bowler’s (2017) consultant is agemates with the Logoori consultant for this volume. This is not a situation of variation that is restricted to either Logoori or to expletive agreements—we have observed these kinds of variation in various grammatical constructions, such as clitic doubling, object (a)symmetry, and others (usually around what might be called subtle aspects of a language’s grammar, as we are studying here).

- b. #ga-fan-a kuresa Imali a-saal-a  
 6-seem-FV like 1Imali 1-be.sick-FV  
 ‘It seems like Imali is sick’  
 (Gluckman and Bowler, 2017, 1065)

The opposite situation yields the opposite expletive patterns: if the speaker has directly observed Imali’s physical symptoms, the class 6 expletive becomes felicitous and the class 9 expletive is less natural.

(143) *Context: The speaker sees Imali coughing and sneezing. They say:*

- a. ?e-fan-a kuresa Imali a-saal-a  
 9-seem-FV like 1Imali 1-be.sick-FV  
 ‘It seems like Imali is sick’
- b. ga-fan-a kuresa Imali a-saal-a  
 6-seem-FV like 1Imali 1-be.sick-FV  
 ‘It seems like Imali is sick’  
 Speaker’s comment: “(143b) is only appropriate if you’re looking at Imali.”  
 (Gluckman and Bowler, 2017, 1065)

For this variety of Logoori, Gluckman (2021) argues that these expletive agreements on matrix predicates are the result of agreement between matrix T and the embedded CP (similar to Halpert’s 2019 analysis of Zulu hyper-raising). He shows, for example, that these expletive agreements are CP-linked, only occurring together with selected CPs and not in other contexts where languages tend to use expletives (e.g. weather predicates). Gluckman also argues against a variety of alternative accounts, the details of which are important for ultimate answers to these questions but will take us beyond our main concerns here.

### 7.3.2 The evidential properties of Tiriki ‘expletive’ agreements

As in expletive-rich Logoori, with perception verb predicates we see the directness of a speaker’s evidence distinguishing between the naturalness of the different expletives in Tiriki. So, when the speaker is directly observing the event described in the perceptual report, the class 9 expletive is appropriate, but the class 6 expletive is not:

(144) *The speaker is at a soccer game, watching Manchester United play. She would say:*

- a. i-lolekh-a Manchester va-vay-a vulahi  
 9SM-seem-FV Manchester 2SM-play-FV well  
 ‘It seems that Manchester is playing well’
- b. #ka-lolekh-a Manchester va-vay-a vulahi  
 6SM-seem-FV Manchester 2SM-play-FV well  
 ‘It seems that Manchester is playing well’

When the speaker’s evidence is comparatively less direct, however, the the class 9 expletive becomes infelicitous and the class 6 expletive is appropriate.

(145) *The speaker is listening to a newscast or someone else telling him about the game. She would say:*

- a. #i-lolekh-a Manchester va-vay-a vulahi  
 9SM-seem-FV Manchester 2SM-play-FV well  
 ‘It seems that Manchester is playing well’
- b. ka-lolekh-a Manchester va-vay-a vulahi  
 6SM-seem-FV Manchester 2SM-play-FV well  
 ‘It seems that Manchester is playing well’

In a similar vein, the speaker’s certainty about the truth of the proposition and the amount of evidence the speaker has for it follow a similar pattern, with *ka-* conveying that the speaker has less evidence/is less sure

and *i-* conveying that the speaker has more evidence/is more sure. As our consultant communicates it, there does appear to be some kind of scalar effect where the appropriate use depends on a comparison with usage of the other expletive.<sup>21</sup>

(146) *Alulu, Franco, and Mike are eating dinner. Alulu gets up and leaves his plate on the table. Some time passes, and he hasn't yet returned. Noticing Alulu's abandoned plate of food on the table, Mike says:*

- a. ka-lolekh-a Alulu a-tsir-e  
6SM-seem-FV Alulu 1s-leave.PST-FV  
'It seems like Alulu left'
- b. #i-lolekh-a Alulu a-tsir-e  
9SM-seem-FV Alulu 1s-leave.PST-FV  
'It seems like Alulu left'

(147) *Franco also notices that Alulu's coat, hat, and car are gone; that is, he notes even more evidence than Mike did. He says:*

- a. i-lolekh-a Alulu a-tsir-e  
9SM-seem-FV Alulu 1s-leave.PST-FV  
'It seems like Alulu left'
- b. #ka-lolekh-a Alulu a-tsir-e  
6SM-seem-FV Alulu 1s-leave.PST-FV  
'It seems like Alulu left'

As is clear from (148) and (149) below, with a perception raising verb the expletive agreements are differentially acceptable based on the directness of evidence for the information contained in the perceptual report:

(148) *If I come across the students leaving the gate of the school:*

- a. #ka-lolekh-a khuli vaana va-mal-i kasi y-a musukulu  
6SM-seem-FV that 2-child 2SM-finish.PST-FV 9-work 9-ASSC 18-in.school  
'It seems that the children have finished their schoolwork'
- b. i-lolekh-a khuli vaana va-mal-i kasi y-a musukulu  
9SM-seem-FV that 2-child 2SM-finish.PST-FV 9-work 9-ASSC 18-in.school  
'It seems that the children have finished their schoolwork'

(149) *You live next to the school and hear the children making noise as they are leaving (you don't see them directly):*

- a. ka-lolekh-a khuli vaana va-mal-i kasi y-a musukulu  
6SM-seem-FV that 2-child 2SM-finish.PST-FV 9-work 9-ASSC 18-in.school  
'It seems that the children have finished their schoolwork'
- b. #i-lolekh-a khuli vaana va-mal-i kasi y-a musukulu  
9SM-seem-FV that 2-child 2SM-finish.PST-FV 9-work 9-ASSC 18-in.school  
'It seems that the children have finished their schoolwork'

These interpretations persist in hyper-raising constructions, as the examples below show:

(150) *Context: If I come across the students leaving the gate of the school:*

- a. #vaana ka-lolekh-a khuli va-mal-i kasi ya musukulu  
2-child 6SM-seem-FV that 2SM-finish.PST-FV 9-work 9-ASSC 18-in.school  
'The children seem to have finished their schoolwork'
- b. vaana i-lolekh-a khuli va-mal-i kasi ya musukulu  
2-child 9SM-seem-FV that 2SM-finish.PST-FV 9-work 9-ASSC 18-in.school  
'The children seem to have finished their schoolwork'

<sup>21</sup>A careful semantic analysis is merited here, both empirical and theoretical. But this degree of careful semantic analysis goes beyond the scope of our current concerns: we seek to motivate the analysis of these forms as expletive agreements, and therefore motivate the existence of the null expletives in the first place. The specific semantics of the expletives is an issue for future research.

- (151) *You live next to the school and hear the children making noise as they are leaving (you don't see them directly):*
- a. vaana ka-lolekh-a khuli va-mal-i kasi ya musukulu  
2-child 6SM-seem-FV that 2SM-finish.PST-FV 9-work 9-ASSC 18-in.school  
'The children seem to have finished their schoolwork'
  - b. #vaana i-lolek-ha khuli va-mal-i kasi ya musukulu  
2-child 9SM-seem-FV that 2SM-finish.PST-FV 9-work 9-ASSC 18-in.school  
'The children seem to have finished their schoolwork'

This is exactly what is expected if the agreement triggers of these agreements are the same in unraised and raised environments.

### 7.3.3 Directions for a Luyia analysis

Tiriki (and the expletive-rich version of Logoori investigated by [Gluckman and Bowler 2017](#) and [Gluckman 2021](#)) therefore offers an approach to Luyia raising that could potentially allow for an application of Halpert's account. Surface-identical CPs could bear different properties, specifically different evidential properties that are evidenced by those CPs bearing different  $\varphi$ -features. This path of analysis would allow a Halpert-style analysis of Tiriki where agreement with CP unlocks the embedded phase for raising, and could potentially explain the differences between the *-roreka* and *-fwaana* predicates in the Logoori variety that we investigate: perhaps the CP complement of *-roreka* and the CP complement of *-fwaana* are featurally distinct, such that the CP complement of *-roreka* can become permeable for hyper-raising whereas that of *-fwaana* cannot.

There are a number of ways in which the application of Halpert's analysis will not be straightforward, however: Tiriki and the version of Logoori that we investigate lack independent evidence of CPs bearing  $\varphi$ -features, for example. For example, Tiriki CPs resist object marking with both class 6 and class 9 OMs. In (152), the intended reading in which the object marker refers to the entire CP (*khuli vaana vatukhi* 'that the children arrived') is not possible.

- (152) A: Isaka a-vor-i khuli vaana va-tukh-i  
Isaka 1SM-say-FV that 2-child 2SM-arrive-FV  
'Isaka said that the children arrived'
- B: Awa, Alex a-ka-vor-i  
no Alex 1SM-6OM-say-FV  
'No, Alex said it' \*Intended reading
- B: \*Awa, Alex a-i-vor-i  
no Alex 1SM-9OM-say-FV  
Intended: 'No, Alex said it'

Likewise, Halpert's (2019) account of Zulu relies on an intricate set of facts around what XPs can satisfy the EPP and what cannot: centrally, CPs cannot satisfy the EPP property of T. But in Tiriki CP subjects are readily available:

- (153) a. I-cheny-a (khuli) vaana veve va-tukh-i  
9SM-be.surprising-FV (that) 2-child 2-POSS 2SM-arrive-FV  
'It is surprising that his/her children arrived'
- b. [\*(Khuli) vaana veve va-tukh-i ] i-cheny-a  
that 2-child 2-POSS 2SM-arrive-FV ] 9SM-be.surprising-FV  
'That his/her children arrived is surprising'
- c. Ka-cheny-a (khuli) vaana veve va-tukh-i  
6SM-be.surprising-FV (that) 2-child 2-POSS 2SM-arrive-FV  
'It is surprising that his/her children arrived'
- d. [\*(Khuli) vaana veve va-tukh-i ] ka-cheny-a  
that 2-child 2-POSS 2SM-arrive-FV ] 6SM-be.surprising-FV  
'That his/her children arrived is surprising'

Therefore, even if examples as in (153) may be suggestive of so-called “expletive” subject markers agreeing with CPs (since CPs are the thematic subjects here, and are triggering the same SMs we’ve been considering), the availability of CPs in subject position is a challenge for Halpert’s account. For Halpert (2019), the inability of CPs to satisfy Zulu’s EPP quality is central to explaining why matrix T can probe again into the now-permeable CP complement. The point here is simply that while there are intriguing connections with Halpert’s account (similar to what is noted by Gluckman 2021), there are many open questions in addition to central evidence that challenges a direct application of her account to Logoori and Tiriki.

All of this requires future research. The full argumentation regarding the expletive-like agreements in Tiriki (and the version of Logoori that we report here) and the derivation of hyper-raising takes us far beyond the scope of this paper. Again, our goal here is the prerequisite work to an explanatory analysis of Luyia hyper-raising, namely, to demonstrate that Tiriki and Logoori do in fact display hyper-raising properties, though not in the precise ways that have been previously demonstrated for Zulu. The future analytical work is not possible without this foundation. The purpose of this section is to sketch the ways in which the findings of this paper are relevant to the existing and future work on the issue.

## 8 Conclusions

In this paper we have not attempted to provide an explanatory analysis for hyper-raising in either Logoori or Tiriki. Our goal has been fairly restricted: to demonstrate that hyper-raising occurs in languages in the Luyia subgroup of Narrow Bantu, though the construction takes a different shape in Tiriki and Logoori. This task itself is non-trivial, as should be clear to the reader at this point: both Logoori and Tiriki have multiple kinds of hyper-raising constructions even with the same raising predicate (agreeing and non-agreeing raising), with Tiriki also demonstrating multiple forms of non-agreeing raising. Studying these constructions is not simple, in that alternative analyses abound: apparent hyper-raising could in fact be a copy-raising construction, and apparent non-agreeing raising could in fact be a left-dislocation construction. What we have shown, however, is that (similar to Halpert’s conclusions for Zulu), these constructions are in fact hyper-raising constructions (in most instances).

This paper makes a number of empirical contributions to the documentation of Logoori and Tiriki and to our knowledge of hyper-raising constructions in Bantu languages. In both languages it is possible to A-move an embedded subject to matrix subject position out of a finite embedded clause. We demonstrated this with multiple forms of evidence for both languages, including diagnostics for A-movement (creation of new positions for binding and the ability of raising to feed later A-movement), connectivity effects (retention of idiomatic readings in raising, and the availability of reconstructed readings in raising), along with properties of the raised subject that are consistent with subject properties in each language (including the ability to be new information and extracting like other canonical subjects).

We have shown that it is non-trivial to apply Halpert’s (2019) analysis of Zulu hyper-raising to Tiriki and Logoori. If Gluckman’s (2021) analysis of expletive-rich Logoori holds up for Tiriki, the apparent ‘expletive’ agreements in non-agreeing hyper-raising might be explained as agreement with featurally-distinct CPs. That said, CPs in the Logoori variety we work with here and in Tiriki do not obviously bear  $\varphi$ -features, nor do the EPP-relevant properties of CPs seem identical to Zulu, which raise many questions about the extent to which Halpert’s account of Zulu can hold up for the Luyia patterns.

Of course, all of this requires a full investigation. But at the very least, the work in this paper makes clear that both agreeing and non-agreeing hyper-raising exist in both Logoori and Tiriki, but also makes clear that there are conditions related to non-agreeing hyper-raising in both languages: in Logoori the choice of raising predicate influences the availability of non-agreeing raising, and in Tiriki non-agreeing hyper-raising is connected with the evidential properties evidenced by the class 6 and class 9 SMs. Additional work is necessary in order to test the full range of Halpert’s predictions and to either adjust her analysis or propose a different one.

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