

Parameterizing Case and Activity: Hyper-raising in Bantu^{*}

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1. Introduction

Case theory has long played a crucial role in explaining the distribution of nominal expressions. Raising constructions are a well-established case in point (Chomsky 1981, George & Kornfilt 1981, Chomsky 2000, Chomsky 2001, among others). As (1a) shows, a raising verb may have an expletive subject and take as complement a finite clause containing a thematic subject. (1b) shows that if the complement clause is an infinitive, the embedded subject cannot surface within it since, by assumption, it cannot have its Case checked by the non-finite downstairs T. A licit result is obtained only if the embedded subject enters into a relationship with the matrix finite T and raises to the matrix clause, because only finite T can check its Case.

- (1) a. It seems [that John is sick]
b. *It seems [John to be sick]
c. John seems [<John> to be sick]

Example (2) illustrates that raising to the matrix clause is impossible if the lower clause is tensed. This is generally taken to indicate that the subject *John* has its Case needs met in the lower clause, rendering it inactive for Case-checking and agreement operations in the higher clause.

- (2) *John seems [(that) <John> is sick]

Many Bantu languages exhibit apparent raising out of a finite clause in a construction known as HYPER-RAISING (cf. Harford Perez 1985; and Tanaka 2002, Martin & Nunes 2005, Nunes 2008, Ura 1998, Zeller 2006 for similar problems in various languages). This paper explores HYPER-RAISING in Lubukusu and Lusaamia, two members of the Luyia subgroup of Bantu spoken in Kenya. The (a) examples below give perceptual verbs

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with expletive subjects, whereas the (b) examples have raised subjects and thus appear comparable to the unacceptable English example in (2); yet they are grammatical.

(3) a. Ka-lolekhana (mbo) babaandu ba-kwa [Lubukusu]
 6SA-seem (that) 2people 2SA.PST-fall¹
 ‘It seems that the people fell.’

b. babaandu ba-lolekhana (mbo) ba-kwa
 2people 2SA-seem (that) 2SA.PST-fall
 ‘The people seem like they fell/The people seem to have fallen.’

(4) a. Bi-bonekhana koti Ouma a-kusa enyumba eyaye [Lusaamia]
 8SA-appear that 1SA-sell 9house 9POSS
 ‘It appears that Ouma is selling his house.’

b. Ouma a-bonekhana (koti) a-kusa enyumba eyaye
 1SA-appear (that) 1SA-sell 9house 9POSS
 ‘Ouma appears as if he’s selling his house/Ouma appears to be selling his house.’

Though HYPER-RAISING has been described in quite a few languages, it has most often been linked to circumstances in which tense and agreement in the embedded clause are less than robust. Zeller (2006) reports HYPER-RAISING in Nguni (Bantu, South Africa) where the raising complements are always subjunctive. Assuming that tense checks Case, Zeller argues that raising is possible because the raised subject is not Case-checked in the lower clause by the subjunctive T. Nunes (2008) reports on HYPER-RAISING constructions in Brazilian Portuguese, arguing that a defective subject agreement paradigm betrays embedded T in BP HYPER-RAISING to be phi-incomplete, and thus unable to check Case.

In contrast to such cases, both clauses of Luyia HYPER-RAISING constructions exhibit a full range of tense and agreement possibilities.² Subjects controlling agreement in various person and noun class combinations appear throughout the paper; we demonstrate in (5) and (6) that choice of tense in the embedded clause is unrestricted.

(5) a. Efula e-lolekhana e-kw-ile (FP = Far past) [Lubukusu]
 9rain 9SA-seem 9SA-rain-FP
 ‘It seems to have rained’
 [Lit: Rain seems that has fallen]

b. Efula e-lolekhana y-a-kw-ile (RP = Recent past) [Lubukusu]
 9rain 9SA-seem 9SA.RP-fall-PST
 ‘It seems to have rained’
 [Lit: Rain seems that has fallen]

¹Numbers in glosses represent noun classes (i.e. grammatical gender), not person features. As for other glosses, SA = subject agreement, PRS = present, PST = past, PASS = passive, SBJT = subjunctive, PFV = perfective, PROG = progressive, PERS = persistent, OA = object agreement, APPL = applicative, FUT = future, POSS = possessive.

²Though we will not demonstrate the relevant contrasts here, the raised subject controls ordinary SA in Luyia, not operator or expletive type agreement.

- (6) Efula yi-bonekhana i-na-kwa muchiri (FUT = Future) [Lusaamia]
9rain 9SA-appear 9SA-FUT-fall tomorrow
'It seems that it will rain tomorrow'
[Lit: Rain seems will fall tomorrow]

The analysis of Luyia HYPER-RAISING constructions therefore cannot appeal to defective properties of T in the embedded clause. Instead this paper relates Luyia HYPER-RAISING to a variety of other evidence indicating that Case and "Activity" in A-relations must be parameterized across languages. In particular, we claim that the grammatical gender feature of nouns is valued but uninterpretable, and that due to N-to-D raising it is accessible to all Bantu clause-level probes (Carstens to appear). At the same time, abstract Case is not present at all in the Bantu languages of our study (Diercks to appear). The involvement of gender and the absence of Case combine to make Bantu DPs "hyperactive" in A-relations.

This paper consists of 8 sections. §2 reviews Copy Raising 'seems as if' constructions, illustrating that their properties are crucially different from those of true raising constructions: their subjects lack reconstructed readings. In contrast, §3 presents evidence that the surface subject of the matrix clause in Luyia HYPER-RAISING can be interpreted as within scope of 'seem', arguing that the subject's base position lies in the embedded clause. §4 offers two constructions which give further evidence for a movement analysis of Luyia HYPER-RAISING. §5 presents an interim summary and analysis, and §6 and §7 describe and address three major issues which arise from these constructions in the domains of phase theory, DP Activity, and Case. §8 concludes.

2. Raising vs. Copy Raising

There is an English raising-type construction that includes a finite lower clause whose subject is usually a pronoun coreferent with the surface subject of the *seems* clause.³

- (7) John seems like he is sick.

Rogers (1972), Potsdam & Runner (2000) and others have pointed out that the interpretation of the so-called Copy Raising construction is restricted in a way that a true raising construction is not. In particular, there is no reading available in which the Copy Raising subject is under the scope of *seem*.⁴ Rogers (1972) generalizes that the subject of a Copy Raising construction must be the *perceptual source* of the state of affairs being reported. Thus (7) only serves as an observation about John or his appearance; unlike (1c), it would be anomalous to state (7) as a deduction upon finding that John is absent from a class. A similar contrast can be noted in (8). The indefinite subject in (8b) favors

³As Heycock (1994) and others have pointed out, it is possible for the pronominal copy in a Copy Raising construction to be other than the subject: *Ermintrude looks like the cat got her tongue*.

⁴Landau (2009) suggests that there is a reconstructed reading for the Copy Raising construction *Syntax seems like it's interesting*. We disagree with his assessment of the reading, but in any case, we demonstrate here that the interpretations available for Luyia HYPER-RAISING perfectly match those of true raising constructions in English, not those characteristic of Copy Raising, and we show that independently motivated properties of Bantu support a true raising analysis. Since a base-generated Copy Raising analysis is not motivated, we will not pursue the details of such constructions.

a reading synonymous to (8a), but (8c) is anomalous to say upon looking in the refrigerator and finding it bare.

- (8) *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 s/he has eaten all the food!

In light of such contrasts the subject of an English Copy Raising construction has been analyzed as base-generated in the matrix clause, in a special relation with the CP that follows it (for Potsdam & Runner op cit, the matrix and embedded subject positions form a base-generated A-chain; for Landau 2009 and others, the CP functions as (part of) a predicate).

The question of Copy Raising is relevant to Lubukusu and Lusaamia HYPER-RAISING because these are null subject languages. It is therefore in principle possible that the constructions we are considering are actually Copy Raising constructions with *pro* in embedded subject position. The interpretive asymmetries between Copy Raising on the one hand and true raising on the other provide an important diagnostic tool for determining the appropriate analysis.

3. Reconstructed Readings for Subjects in Luyia HYPER-RAISING

In contrast to English Copy Raising, Luyia HYPER-RAISING constructions consistently allow for readings in which the surface subject of the matrix clause is interpreted in the lower clause under the scope of ‘seem’. This argues that, in contrast with the subjects of Copy Raising sentences like (7) and (8c), the surface subject of ‘seem’ type verbs in Luyia can truly undergo syntactic raising out of tensed clauses.

Consider the scenario for the sentences in (9). Animals are completely absent, and therefore the statements in (9a,b) cannot be interpreted as statements derived from observing their behavior or appearance. Recall that in the terminology of Rogers (1972) the subject of a Copy Raising construction is the perceptual source; given the scenario this cannot be the case in (9b).

- (9) *Scenario: You don't see any animals in the game park. You can say:*

- a. Ka-lolekhana mbo chisaang'i chi-kona [Lubukusu]
 6SA-seem that 10animal 10SA-sleep.PRES
 ‘It seems that the animals are sleeping.’
- b. Chisaang'i chi-lolekhana chi-kona
 10animal 10SA-seem 10SA-sleep.PRES
 ‘The animals seem to be sleeping.’

Under the scenario provided, the construction in (9b) is interpreted with the DP subject ‘animals’ in the embedded clause under the scope of ‘seem’. We will refer to this as the

reconstructed reading for the matrix subject (to be accounted for formally in §6-8).⁵ In the English Copy Raising construction, reconstructed readings of this kind are impossible for the surface subject of ‘seem’, arguing that it does not originate in the lower clause.

The reconstructed reading for the matrix subject is demonstrated also in (10b), a sentence judged fully acceptable in the absence of any cows. Once again the Copy Raising analysis is incompatible with the interpretation.

(10) *Scenario: You find that the watering hole is empty. Though there are no cows on site, you can say:*

- a. Bi-bonekhana koti eng’ombe chi-ng’were amachi [Lusaamia]
8SA-appear that 10cow 10SA-drink 6water
‘It appears that the cows drank the water’
- b. Eng’ombe chi-bonekhana chi-ng’were amachi
10cow 10SA-appear 10SA-drink 6water
‘The cows appear to have drunk the water’

Similarly, (6) (repeated below) can be felicitously uttered upon reading the weather forecast in a newspaper, indicating a reconstructed reading for the surface subject *efula* – ‘rain’ of the matrix clause.

- (6) Efula yi-bonekhana i-na-kwa muchiri (FUT = Future) [Lusaamia]
9rain 9SA-appear 9SA-FUT-fall tomorrow
‘It seems that it will rain tomorrow’
[Lit: rain seems will fall tomorrow]

Reconstructed readings have proved to be readily available for the matrix subjects of HYPER-RAISING constructions in the two languages, just as they are in English raising constructions. We have found one very interesting point of cross-linguistic variation, however: In Lusaamia, the reconstructed reading is blocked by the presence of a complementizer in the embedded clause; in Lubukusu this is not the case, at least not with the generic ‘that’ type complementizer. Thus the Lusaamia (11a) is acceptable as an observation about the cows; it cannot be stated under the scenario given in (10), where cows are absent. This is not the case in Lubukusu; (11b) is an acceptable variant of (10b) in the circumstance described in (10).⁶

- (11) a. Eng’ombe chi-bonekhana koti chi-ng’were amachi [Lusaamia]
10cow 10SA-appear that 10SA-drink 6water
‘The cows appear as if they have drunk the water’
No reconstructed reading

⁵Though Lasnik (1999) argues against reconstruction in A-movement, much evidence to the contrary has amassed since. See among others McGinness (2009) for persuasive arguments in favor.

⁶We postpone until §6 discussion of a systematic exception to this Lubukusu generalization involving a special, agreeing complementizer.

- b. Chisaang’i chi-lolekhana mbo chi-kona [Lubukusu]
 10animal 10SA-seem that 10SA-sleep.PRS
 ‘The animals seem to be sleeping.’
Reconstructed reading generally accepted

The contrast between (10b) and (11a) argues that HYPER-RAISING and Copy Raising constructions are homophonous in Lusaamia, but the former is incompatible with a complementizer. We will argue in §6 that the Lusaamia complementizer *koti* is a phase head; hence A-movement out of a *koti* CP is blocked. Lubukusu *mbo* is not a phase head, so A-movement across it is possible. The Lusaamia judgments strongly support the movement analysis; as §6 will show the Lubukusu judgments correlate with the existence of a particularly rich left periphery in which distinct complementizers are possible at different levels of structure.

4. Confirmation that Bantu HYPER-RAISING is Movement-derived

4.1 Super Raising

We suggested in §3 that HYPER-RAISING and Copy Raising constructions are both present in Lusaamia, and that the latter are recognizable from the absence of reconstructed readings for their subjects. We show here that Copy Raising exists in Lubukusu as well and can also be distinguished from HYPER-RAISING on the basis of available and unavailable readings.

Compare the Lubukusu data in §3 with Super Raising constructions in (12b) and (13b). These examples are also acceptable, but they permit only perceptual source interpretations of the subject.

- (12) a. Ka-lolekhana mbo basomi ba-many-ile mbo mwalimu a-lwala
 6SA-seem that 2students 6SA-know-PFV that 1teacher 1SA-be.sick
 ‘It seems like the students know that the teacher is sick.’
- b. Mwalimu a-lolekhana mbo basomi ba-many-ile mbo a-lwala
 1teacher 1SA-seem that 2students 2SA-know-PFV that 1SA-be.sick
 ‘The teacher seems like the students know he is sick.’
The teacher’s appearance or behavior reveals that the students know
- (13) a. Ka-lolekhana mbo omuseecha wewe k-enya omukhaasi a-ch-e
 6SA-PRS.seem that 1husband 1her 1SA-PRS.want 1woman 1SA-go-SBJT
 ‘It seems like her husband wants the woman to leave.’
- b. Omukhaasi a-lolekhana mbo omuseecha wewe k-enya a-ch-e
 1woman 1SA-PRS.seem that 1husband 1her 1SA-PRS.want 1SA-go-SBJT
 ‘The woman seems like her husband wants her to go.’
Necessarily an observation about the woman

The restricted interpretations available for these examples show that there is a locality requirement for the reconstructed readings that diagnose true HYPER-RAISING constructions, as a movement analysis of them would predict.

4.2 Passive Raising

Further support for a movement approach comes from passive raising constructions, where the embedded subject raises to subject position of a matrix passive verb (see Harford-Perez 1985 for similar constructions in Shona, Kikuyu, and Kiruúndi).

- (14) a. Ka-a-suubil-wa mbo omukeni k-ola [Lubukusu]
6SA-PST-believe-PASS that 1guest 1SA-PST.arrive
‘It was believed that the guests arrived.’
- b. Omukeni ka-a-suubil-wa mbo k-ola
1guest 1SA-PST-believe-PASS that 1SA-PST.arrive
‘The guest was believed to have arrived.’

Like ‘seem’ and ‘appear’, passive verbs lack thematic subjects. The thematic role of *omugeni* in (14b) can only come from the ‘arrive’ clause; thus (14b) demonstrates the classic properties of an A-movement construction.

5. Interim Summary and Provisional Analyses

We have introduced and distinguished four constructions, and made some crucial claims about their properties. Here we summarize them and provide initial sketches of analyses that will be refined in §6 and §7.

We propose that Luyia HYPER-RAISING constructions with reconstructed readings are truly raising constructions out of clauses with ϕ -complete agreement and robust tense. Thus a partial representation of the structure of (6) (repeated below) is (15):

- (6) Efula yi-bonekhana i-na-kwa muchiri (FUT = Future) [Lusaamia]
9rain 9SA-appear 9SA-FUT-fall tomorrow
‘It seems that it will rain tomorrow’
[Lit: rain seems will fall tomorrow]

- (15) *Luyia HYPER-RAISING out of tensed clauses:*
[_S rain SA-T-appear...[_S <rain> SA-T-fall]]

True raising is also involved when the matrix verb is passive, as we have seen. Thus the representation for the Lubukusu passive raising case in (14b, repeated below) is (16).

- (14) b. Omukeni ka-a-suubil-wa mbo k-ola [Lubukusu]
1guest 1SA-PST-believe-PASS that 1SA-PST.arrive
‘the guest was believed to have arrived.’

- (16) *Passive HYPER-RAISING:*
[_S the guest SA-T-believe-PASS [_S that <the guest> SA-T-arrive]]

In contrast, following Potsdam & Runner (op cit) and Landau (1999), a Luyia Copy Raising sentence is base-generated. The schematic representation of (11a, repeated below) is therefore as in (17).

- (11) a. Eng’ombe chi-bonekhana koti chi-ng’were amachi [Lusaamia]
 10cow 10SA-appear that 10SA-drink 6water
 ‘The cows appear as if they have drunk the water’
No reconstructed reading

- (17) *Luyia Copy Raising:*
 [s the cows SA-T-seem...[s that *pro* SA-T-drank water]

A Super Raising construction is a base-generated Copy Raising construction in which the pronominal copy is further embedded in the structure.

- (12) b. Mwalimu a-lolekhana mbo basomi ba-many-ile mbo a-lwala
 1teacher 10SA-seem that 2students 2SA-know-PFV that 1SA-be.sick
 ‘The teacher seems like the students know he is sick.’
The teacher’s appearance or behavior reveals that the students know

- (18) *Luyia Super Raising:*
 [s teacher SA-T-seems [s that students SA-T know [s that *pro* SA-T-be.sick]]]

With these hypotheses in mind we turn to consideration of the theoretical issues involved.

6. Theoretical Issues

The phenomenon of HYPER-RAISING involves theoretical issues related to (i) phase theory; (ii) the theory of “activity” in A-relations; and relatedly (iii) the theory of abstract Case. We outline them in this section and address them in the next.

6.1 Phase Theory

Chomsky (2000, 2001) proposes that C and transitive v^* are strong phases: once they are Merged and their features checked, their complements are Transferred to the C-I and S-M interfaces and are therefore not accessible to further syntactic operations; this is the Phase Impenetrability Condition of Chomsky (2001). And though non-finite TPs can be complements to verbs, finite TPs are only present when C is present. On this view, A-movement out of an infinitive need only cross non-phasal TP, but A-movement out of a tensed clause is necessarily movement out of a CP. The evidence for raising out of Luyia tensed clauses presents something of a puzzle, under these assumptions. In particular, the theory predicts that raising from a tensed clause would have to pass through Spec, CP, an option generally restricted to operators (Chomsky 2007).

6.2 Activity

In the framework of Chomsky (2001, henceforth DBP) both probe and goal in an Agree relation must be “active” – they must have uninterpretable features (henceforth uF) that have not yet been valued and, as a result, marked for deletion. We will refer to the constraint on choice of goals as the Active Goal Requirement, and to the overall proposal

as Activity. In the system of A-relations, the feature making a nominal expression active is abstract Case. Chomsky writes:

For the Case-agreement systems, the uninterpretable features are ϕ -features of the probe and structural Case of the goal N. ϕ -features of N are interpretable; hence, N is active only when it has structural Case. Once the Case value is determined, N no longer enters into agreement relations and is “frozen in place. (DBP: 6)

How is the Case of a subject determined? Chomsky writes:

When ϕ -complete, T values and deletes structural Case for N. The ϕ -set of N...both values and deletes the ϕ -features of T... (DBP: 8)

These passage spell out guiding assumptions of Minimalist work on A-relations. A DP must enter into an Agree relation with a ϕ -complete T; having done so its Case is valued and deletes, leaving the DP inactive. It cannot serve as goal in Agree relations after this point.

If the reconstructed readings for Luyia’s hyper-raised subjects are diagnostics of A-movement, as we have suggested, then something different is involved in how the Active Goal Requirement is met in Luyia A-relations.

6.3 Case Theory

Closely related to the issue raised in 6.2 is a significant question regarding the Case of a hyper-raised subject. Examples like (10a) have already shown that the option exists of leaving the thematic subject in Spec, TP of its source clause, arguing that the embedded clause of HYPER-RAISING is not defective in any way. Further evidence comes from the fact that each such embedded clause can stand alone as a main clause with an overt subject as exemplified in (19).

(10) *Scenario: You find that the watering hole is empty. Though there are no cows on site, you can say:*

a. Bi-bonekhana koti eng’ombe chi-ng’were amachi [Lusaamia]
8SA-appear that 10cow 10SA-drink 6water
‘It appears that the cows drank the water’

(19) Eng’ombe chi-ng’were amachi =*embedded clause of (10a)* [Lusaamia]
10cow 10SA-drink 6water
‘The cows drank the water’

The facts clearly demonstrate that the embedded clause of a HYPER-RAISING construction is a domain in which a DP subject’s Case could in principle be valued and deleted. We noted in the previous section that, under standard assumptions, this should cause the DP to become inactive in A-relations. A related question is, could it be that the Case of the subject is valued and deleted twice, in Bantu HYPER-RAISING constructions? It is unclear what kind of mechanism might make this possible.

7. Analysis

7.1. Structures and the Phase Theory Question

7.1.1 Bare TPs with Tense and Agreement

We noted in §3 that while reconstructed readings are acceptable for all speakers of both Luyia varieties when a complementizer is absent, there is variation between Lusaamia and Lubukusu on the acceptability of a complementizer in the HYPER-RAISING embedded clause. In Lusaamia, a complementizer is incompatible with the reconstructed reading. We accordingly propose that when a complementizer is absent, no movement- or phase-theoretic problem arises because the embedded clause is a bare TP, not a CP.

(20) [TP DP seem [TP <DP> T VP]]

In a crucial contrast with English, the bare Luyia TP out of which raising proceeds has independent tense and agreement. Chomsky (2007) argues that the features of T are inherited from C; hence in a bare embedded TP these are automatically lacking. But Carstens (to appear) observes that Bantu C can agree with an operator while the local T agrees with a subject; this argues that Bantu T must have independent features.

- (21) a. Biki **bi-b-éte** **bá-ku-lyá?** [Kilega]
 8what 8whAgr-2SA-ASP1 2SA-ASP2-eat
 ‘What are they eating?’
- b. emikeeka abawala **gye-ba-a-luka** [Luganda]
 mat 2girl 4whAgr-2SA-PST-plait
 ‘the mats that the girls plaited’
- c. Ekihi **kyo** Kambale **a-langira** [Kinande]
 what 7whAgr-C Kambale 1SA-see.PAST
 ‘What did Kambale see?’

Assuming with Carstens (op cit) that Bantu T is not dependent on C for its features, there is no reason why a bare TP would have to be an infinitive as it is in English. In Bantu, a bare TP can have $u\phi$ and full tense. If CP is nonetheless the relevant strong phase, there is no phase-theoretic obstacle to raising out of tensed TPs.⁷

7.1.2 Some CPs are Phasal; Some are Not

Given that Lusaamia CPs headed by a complementizer are opaque domains for HYPER-RAISING, we conclude that they are phases. A-movement out of them is not possible because after Merge of the embedded C, its TP complement is Transferred away. The result is that reconstructed readings are ruled out when a Lusaamia complementizer is present, indicating that this is a Copy Raising construction (see 11a, repeated below, and 22). The full structure is provided in (23).

⁷ Note that the evidence is inconsistent with the claim in Chomsky (2007) that uF probes are exclusively phase-heads, unless this status is accorded to Bantu T (raising potential questions about Bantu A'-movement that we will not pursue here).

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- (11) a. Eng'ombe chi-bonekhana koti chi-ng'were amachi [Lusaamia]
10cow 10SA-appear that 10SA-drink 6water
'The cows appear as if they have drunk the water'
No reconstructed reading; only an observation on the cows
- (22) Ouma a-bonekhana koti a-dekha ebia'ngolobe
Ouma 1SA-appear that 1SA-cooked 8food
'Ouma appears as if he has cooked the food.'
Only an observation about Ouma, based on his wearing a dirty apron, etc.
- (23) *Lusaamia 'seems' construction with a complementizer: This can only be base-generated Copy Raising; hence no reconstructed reading for the matrix subject:*
- [_{TP} DP seem [_{CP} koti [_{TP} *pro* T VP]]]

In contrast, the presence of Lubukusu complementizer *mbo* is for many speakers compatible with reconstructed readings (see 11b, repeated below, and 24).

- (11) b. Chisaang'i chi-lolekhana mbo chi-kona [Lubukusu]
10animal 10SA-seem that 10SA-sleep.PRS
'The animals seem to be sleeping.'
OK as deduction from the absence of animals (=the reconstructed reading)
- (24) Mikaeli a-lolekhana mbo a-si-kona
Michael 1SA-seem that 1SA-PRES-sleep
'Michael seems to be still sleeping.'
*OK upon passing Michael's house and seeing that it is dark
(=the reconstructed reading)*

Lubukusu has a number of complementizers, and not all of them pattern alike in this regard. One complementizer *-li* agrees with the matrix subject (see 25 below and Diercks 2010 for details). It is completely excluded from raising constructions (see 26). We propose that the CP phase head in Lubukusu is *-li*, and that it occupies a higher position in the articulated left periphery (cf. Rizzi 1997) than *mbo*.

- (25) Alfredi a-a-bolela babaandu **a-li** ba-kha-bile
Alfred 1SA-PST-tell 2person 1CA-COMP 2SA-FUT-conquer
'Alfred told the people that they will win.'
- (26) *Mikaeli a-lolekhana **a-li** a-si-kona
Michael 1SA-seem that 1SA-PERS-sleep
'Michael seems to be still sleeping.'

The syntax of clauses including *sikila* – 'because' provides evidence for the high position of *-li*. *Mbo* can occur in a *because*-phrase as shown in (27), but the agreeing complementizer cannot. We assume that *mbo* is in a lower position; the agreeing complementizer competes with *sikila* – 'because' for the higher C position.

- (27) Alfred a-likho a-cha sikila mbo (*a-li) a-likho
 Alfred 1SA-PROG 1SA-leave because that (*1-comp) 1SA -PROG

a-elekesia Sifuna
 1SA-escort Sifuna

‘Alfred is leaving because he is escorting Sifuna.’

The analysis is illustrated in (28).

- (28) a. $[_{TP} DP \text{ seem } [_{CP1} C [_{TP} \langle DP \rangle T VP]]]$ *Raising OK across CP1*
 |
 non-phase
- b. * $[_{TP} DP \text{ seem } [_{CP2} \text{ Agr-C } [_{CP1} C [_{TP} \langle DP \rangle T VP]]]]$ **Raising across CP2*
 |
 phase

Summing up, the opacity of a CP headed by agreeing *-li* argues that Lubukusu disallows A-movement out of a CP phase just like Lusaamia; initial appearances to the contrary are due to the existence of a low, non-phasal complementizer, *mbo*.

7.3 Activity

Recall from §6 that a licit goal in Agree relations must have an unchecked uninterpretable feature -- that is, one that has not been valued and deletion-marked. This is the Active Goal Requirement; in the A-system, the activating feature is assumed to be Case (DBP: 6). Once a DP has been goal in an Agree relation involving ϕ -complete agreement, it should cease to be active – an additional theoretical obstacle to raising out of a tensed clause.

Carstens (2001) points out that Bantu DPs are routinely involved in multiple ϕ -complete agreement relations in Bantu, so this characterization of how Activity works is not valid as a universal. Compound Tense constructions like (29) illustrate the problem.

- (29) a. Abasiani **babere** **bachekanga** *Lusaamia Compound Tense*
 2boys 2SA-were SA-laugh-ASP
 ‘The boys were laughing’
- b. $[_{TP} SU SA-T [_{AspP} \langle SU \rangle SA-V-ASP [_{VP} \dots]]]$

Carstens (to appear) proposes that a broad range of contrasts between Bantu and Indo-European are due to differences in how the Active Goal Requirement is satisfied. She argues that there is a non-accidental correlation in Bantu between four factors: (i) HYPERAGREEMENT, that is, abundant agreement not restricted to the familiar pairings related by Case such as (T, LOGICAL SUBJECT); (ii) HYPERACTIVITY, that is, unusual A-movements such as Subject Object Reversal (Ndayiragije 1999) and transitive locative inversion (Ndayiragije op cit; Kinyalolo 1991); (iii) nouns surfacing consistently at the DP’s left edge, indicating N-to-D raising/amalgamation; and (iv) grammatical gender as a component of subject agreement. Carstens observes that since A-movement and

agreement are both constrained by the Active Goal Requirement, it is not surprising for the two sets of phenomena to pattern together. She proposes that the crucial factor in liberalizing agreement and movement in Bantu languages is the coincidence of grammatical gender and N-to-D raising, leading to an extra way of satisfying the Active Goal Requirement. Because grammatical gender is generally meaningless, Carstens argues that it is uninterpretable. The gender of nouns differs crucially from Case in being intrinsically valued, Carstens observes; assuming that valuation via an Agree relation is what deactivates a goal, she argues that grammatical gender is an infinitely reusable Activity feature. This gives rise to iterating concord within DPs -- a consistent feature of languages with grammatical gender. Carstens argues that recognizing nominal gender as an Activity feature allows syntactic theory to provide a wholly unified treatment of concord and clause-level agreement.

Since Bantu has N-to-D raising, nominal gender is accessible to probes outside of DP, paving the way for iterating agreement at the clausal level and for extra A-movements. Only N-to-D raising gives DPs a nominal gender feature, and hence an Active Goal feature other than Case; and unlike Case, nominal gender is never valued by Agree and thus never deactivated. These proposals are summarized in (30).

(30) Bantu HYPERAGREEMENT/HYPERACTIVITY (Carstens to appear)

- a. All Bantu agreement includes Noun Class features = gender+number.
- b. Nominal gender is lexically listed but meaningless, hence [+valued], [-interpretable].
- c. Goal Deactivation Principle: Valuation in the Agree relation deactivates a goal (i.e. it cannot subsequently be revalued or acquire multiple values).
- d. The gender of N is not valued through Agree; hence never deactivated.
- e. Because N raises to D in Bantu, DPs are HYPERACTIVE – they have the extra, infinitely re-usable Activity feature of nominal gender.

In Indo-European languages, DP has only the [person] feature of D (31) and the feature [number], which QRs to scope over DP as a whole. In the absence of N-to-D movement, gender is not accessible to value a clause-level probe of undifferentiated $u\phi$. Only past participles, insensitive to [person] as a lexical property, can “see” beyond it to be valued by nominal gender. The DP-internal left-edge position of Bantu nouns is illustrated in (32a), and the N-to-D analysis depicted in (32b). In contrast, Romance languages have grammatical gender, and its reusability as an Activity feature can be seen in the phenomenon of DP-internal concord. But nouns do not systematically raise to D,⁸ so gender is not accessible to any clause level probe that is sensitive to the [person] feature

⁸ See Cinque 2005 for an alternative, strictly NP-movement approach to word order in DPs, and Abels & Neeleman 2006 for counter-arguments. Languages in which N sometimes (but not always) raises do not include grammatical gender in SA, or have any alternations in agreement paradigms that I know of (see for example Longobardi’s 1994 argument that only proper names raise to D in Italian). Perhaps the explanation for this lies in a kind of morphological parsimony favoring a one-time choice of agreement paradigms reflecting features that can consistently be valued, though questions arise regarding the phenomena of “anti-agreement” phenomena under *wh*- subject extraction, and of coexisting agreement paradigms with different features in some ergative languages. An alternative might be some systematic asymmetry in the syntax of common and proper nouns with the result that proper nouns surface in the left edge of the nominal domain but not in fact adjoined to D. A full treatment lies outside this paper’s scope.

of D. Subject agreement features exclude grammatical gender; and neither HYPERAGREEMENT nor HYPERACTIVITY is present in Romance.

- (31) $T_{\mu\phi}$ [DP D_{person, number} . . . [FP N_{gender+F} . . .]] *For probes sensitive to person, gender agreement is blocked*
 |-----X-----|

- (32) a. amapusi akange akaratengi [Lusaamia]
 6cat 6my 6black *Nouns surface at left edge of DP*
 ‘my black cats’

- b. [DP amapusi+D [NumP akange t_F [NP akaratengi [NP t_N]]]] [Lusaamia]
 6cat 6my 6black
 ‘my black cats’

- (33) a. la mia casa [Italian; cf. Cinque 1994]
 the my house *Nouns surface in DP’s middle field*
 ‘my house’

- b. [DP la [FP mia casa [NP t_N]]] *Concord in gender iterates within DP (but is excluded from subject agreement)*

Let us return to the issue of Luyia HYPER-RAISING. Assuming with Carstens (to appear) that the visibility of grammatical gender features on Bantu DPs allows them to satisfy the Active Goal Requirement independently of Case, and without deactivation ever following from Agree relations, Activity theory presents no obstacles for HYPER-RAISING.

7.4 Case

The gender-based approach to HYPERACTIVITY takes us some distance towards the goal of explaining how Luyia HYPER-RAISING constructions mesh with Activity theory. In this section we address two major Case-theoretic questions that remain. First, is nominative Case checked twice for a hyper-raised subject, in both the lower clause and in the higher clause? Second, in light of the proposals in the previous section, what is the relationship between uninterpretable gender and Case in determining Activity?

Diercks (to appear) observes that even the core constructions motivating Case Theory are problematic in Bantu languages. Some of the relevant constructions have already been addressed in this paper, e.g. Compound Tense constructions as in (29a) and passive raising constructions like (14b).

An additional anomaly for Case theory comes from the fact that Bantu languages license a DP as the subject of an infinitive, with no additional Case-marking apparatus.

- (34) a. It is possible *(for) Michael to call Tegan [English]
 b. i-na-wezakana (*kwa) Maiko ku-m-pig-i-a Tegani simu
 9SA-PRS-possible for Michael INF-1OA-beat-APPL-FV Tegani phone
 ‘It is possible (for) Michael to call Tegan’ [Swahili]

Locative inversion constructions gives further evidence, since in Bantu T agrees with the preposed locative expression (see 35, from Kinyalolo 1991). Unlike its English

counterpart in (36), the postverbal subject in a Bantu locative inversion construction does not value agreement at all. There is thus no evidence that it enters into an Agree relation with T that would value and deletion-mark its Case feature, if it has one; yet the construction is licit. Many Bantu languages permit this kind of locative inversion in transitive clauses (see 37, from Diercks to appear, and its schematic representation in 38). In so doing they violate a robust cross-linguistic constraint explored in Alexiadou & Anagnostopoulou (2001), where it is proposed that subject and object cannot both licitly remain in situ because their Cases cannot both be checked in this circumstance. The Bantu facts are at odds with the pattern of facts they report, and with the proposed account.

- (35) Mu-zízo nyumbá **mu-á-nyám-é** bána wálúbí [Kilega]
18-10that 10house 18SA-FUT-sleep-FV 2child one.day.period
‘There will sleep children in those houses tomorrow’
- (36) Down the hill rolls the ball [English]
- (37) Muho-ni pha-na-heka atu madzi [Digo]
river-LOC 16SA-CONT-draw 2person 6water
‘People are drawing water at/from the river’
[Lit: at the river are drawing people water]
- (38) [_{TP} river-LOC SA-T [_T SA+draw+ASP [_{VP} <river-LOC> people v [_{VP} V water]]]]

One might respond to these facts by hypothesizing that Case features are present, but that they do not in fact need to be checked in Bantu, and the role of gender in Activity renders them mostly irrelevant.

Since Bantu languages have no morphological case and do not display many of the predicted syntactic effects of abstract Case, we advance a stronger, hence more interesting theoretical claim. Based on the preponderance of evidence presented in Diercks (to appear) and summarized here, we hypothesize that Bantu languages do not have abstract Case features at all, selecting the negative value for (39).

- (39) **Case Parameter:** Uninterpretable Case features are/are not present in a language. (Diercks, to appear)

This conclusion is reminiscent of a claim made in Bobaljik (2008) to the effect that the distribution of nominal expressions is not governed by morphological case. The Bantu evidence argues for taking this idea one step further; to its logical conclusion—the parameterization of Case and Activity theory.

8. Conclusion

Lubukusu and Lusaamia HYPER-RAISING constructions provide important evidence challenging some central notions of Minimalist theory. We have accounted for them in terms of four broad claims.

- (i) Case theory is not universally adequate to explain NP distribution, and must be

parameterized. In particular, Luyia languages (and likely many more Bantu languages) do not have abstract Case as part of their grammars.

- (ii) When N's position is consistently in the DP's left edge, it amalgamates with D. If N has grammatical gender, DP accordingly inherits this feature.
- (iii) Nominal gender is [+valued, -interpretable]. Due to this combination of properties, it satisfies the Active Goal Requirement and is never deactivated by Agree relations. This leads to the common phenomenon of iterating DP-internal concord; and in N-to-D languages, it leads to HYPERAGREEMENT and HYPERACTIVITY.
- (iv) Clarifying the properties of specific heads within the CP field can yield important insights into cross-linguistic variation with respect to movement phenomena and A-relations.

These proposals provide principled explanations for hitherto unrelated and puzzling aspects of language variation.

References

- Abels, Klaus and Ad Neeleman. 2006. Universal 20 without the LCA. Ms. University College London.
- Alexiadou, A. and E. Anagnostopoulou. 2001. The subject-in-situ generalization and the role of Case in driving computations. *Linguistic Inquiry* 32: 193-231.
- Bobaljik, Jonathan. 2008. Where's phi? Agreement as a post-syntactic operation. In *Phi-Theory: Phi features across interfaces and modules*, eds. D. Harbour, D. Adger, and S. Béjar, 295-328. Oxford: Oxford University Press.
- Carstens, Vicki. 2001. Multiple agreement and Case-deletion: Against ϕ -(in)completeness. *Syntax* 4.3: 147-163.
- . To appear. Hyperactivity and Hyperagreement in Bantu. Forthcoming in *Lingua*.
- Chomsky, Noam. 1981. *Lectures on Government and Binding*. Dordrecht: Foris Publications.
- . 2000. Minimalist inquiries: The framework. In *Step by step: Essays in honor of Howard Lasnik*, eds. R. Martin et al, 89-155. Cambridge: MIT Press.
- . 2001. Derivation by phase. In *Kan Hale: A life in language*, edited by M. Kenstowicz, 1-52. Cambridge, MIT Press.
- Chomsky, Noam. 2007. Approaching UG from below. In *Interfaces + Recursion = Language?* eds. U. Sauerland & H. M. Gartner. Berlin: Mouton de Gruyter.
- Diercks, Michael. 2010. Complementizer agreement in Lubukusu and the role of subjects. Paper presented at the Annual Meeting of the LSA.
- . To appear. Parameterizing Case: Evidence from Bantu. Forthcoming in *Syntax*.
- George, L. M., & J. Kornfilt. 1981. Finiteness and boundedness in Turkish. In *Binding and filtering*, ed. F. Heny. 105-127. Cambridge: MIT Press.
- Harford Perez, C. 1985. Aspects of complementation in three Bantu languages. Ph.D. dissertation, University of Wisconsin-Madison.
- Heycock, Caroline. 1994. Layers of predication: The non-lexical syntax of clauses. New York: Garland.

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- Kinyalolo, Kasangati. 1991. Syntactic dependencies and the SPEC-head agreement hypothesis in Kilega. Ph.D. dissertation, UCLA.
- Landau, Idan. 2009. Predication vs. aboutness in copy raising. Ms., Ben Gurion University, Beer Sheva, Israel.
- Lasnik, Howard. 1999. *Minimalist Analysis*. Oxford: Blackwell.
- Longobardi, Giuseppe. 1994. Reference and proper names: A theory of N-movement in Syntax and Logical Form. *Linguistic Inquiry* 25: 609-665.
- Martins, Ana Maria and Nunes, Jairo. 2005. Raising issues in Brazilian and European Portuguese. *Journal of Portuguese Linguistics* Vol. 4:53-77.
- McGinnes, Martha. 1999. Irreversible binding. Paper presented at the 40th annual meeting of the *North East Linguistic Society*. Cambridge: MIT.
- Ndayiragije, J. 1999. Checking economy. *Linguistic Inquiry* 30: 399-444.
- Nunes, Jairo. 2008. Inherent Case as a licensing condition for A-Movement: The case of hyper-raising constructions in Brazilian Portuguese. *Journal of Portuguese Linguistics* Vol. 7.2: 83-108.
- Potsdam, E. and J. Runner. 2001. Richard returns: Copy raising and its implications. In *CLS 37: Proceedings from the Main Session of the 37th meeting of the Chicago Linguistic Society, Vol. 37-1*, eds. M. Andronis, C. Ball, H. Elston, and S. Neuvel, 453-468. Chicago: Chicago Linguistic Society.
- Rogers, Andy. 1974. A trans-derivational constraint on Richard? In *Proceedings of CLS 10*, ed. by 551-558. Chicago: Chicago University Press.
- Tanaka, Hidekazu. 2002. Raising to object out of CP. *Linguistic Inquiry* 33. 4, 637-652.
- Ura, Hiroyuki. 1998. Checking, economy, and Copy Raising in Igbo. *Linguistic Analysis* 28, 1-2, 67-88.
- Zeller, Joachim. 2006. Raising out of finite CP in Nguni: The case of *fanele*. *South African Linguistics and Applied Language Studies* 24.3, 255-275.

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