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1 Introduction

The Bantu language family is large and diverse both geographically and linguistically. Despite this diversity, clusters of distinctive syntactic properties crop up in one Bantu language after another. Researchers explore questions of causality regarding why this is so, and, since some of these properties are unfamiliar from a Western standpoint, they raise analytical challenges in relation to familiar theoretical notions (which were often initially proposed based on Western languages).

The similarities and differences among Bantu languages have given rise to quite interesting comparative work responding to these challenges, and the literature shows rich engagement with both the empirical patterns and their theoretical implications. This paper focuses on those aspects of Bantu syntax that have raised the most pervasive and persistent theoretical questions, outlining the work thus far, and the directions in which the work is moving. Other individual chapters in this volume can provide readers with more fine-grained detail on a broader range of individual constructions and phenomena.

We ground our work within the generative syntactic framework of the Minimalist Program and its predecessors, though some of the work discussed here was written in other frameworks. The bulk of this overview focuses on A-properties of Bantu languages, specifically looking at the issues of agreement, Case, and word order/structural hierarchy. As a starting point, consider the locative inversion sentences in (1) and (2), which serve to introduce several issues that we will discuss here. In locative inversion for a language with canonical S-V-Loc word order, we instead find Loc-V-S word order (locatives are bolded, thematic subjects underlined):

- (1) a. A-lendô-wo a-na-bwér-á **ku-mu-dzi** [Chichewa]
2-visitor-2those 2S-REC.PST-come-IND 17-3-village (Bresnan & Kanerva 1989: 2)
‘Those visitors came to the village.’
- b. **Ku-mu-dzi** **ku-na-bwér-á** a-lendô-wo
17-3-village 17S-REC.PST-come-IND 2-visitor-2those
‘To the village came those visitors.’

(2) **Into the room** saunters the chubby cat.

How a locative phrase gains the canonical “subject” position (1)b and (2) is an interesting locality question that syntacticians have addressed from cross-linguistic perspectives (see among others Bresnan 1994, Bresnan & Kanerva 1989, Collins 1997, Carstens & Diercks 2013b, Diercks 2011, Polinsky 1993, Salzmann 2004). We take up this topic in §4. But a comparison of these two otherwise similar examples reveals that whether or not a unified answer is possible vis-a-vis locality, other properties of Bantu and English locative inversion significantly differ, so at least some aspects of the accounts must diverge. In the English locative inversion construction in (2) the verb agrees with the postverbal thematic subject. In contrast to this pattern, the subject marker in the Chichewa locative inversion sentence (1)b agrees in class 17 with the fronted locative phrase, and manifests no clear morpho-syntactic relation with the thematic subject. Moreover, according to a range of diagnostics, the inverted Chichewa locative is the structural

subject; for the English inverted locative, this is not so clear (Bresnan & Kanerva 1989, Bresnan 1994; see Diercks 2017 for an overview).

In addition to movement and agreement theoretic questions, the Chichewa locative inversion construction raises important questions about Case and nominal licensing. On standard assumptions, all nominal expressions (henceforth DPs) require Case values and Case on the highest DP in a clause is licensed by the same Agree relation with T(ense) that gives rise to subject agreement. Assuming this, in (1)b it is unclear how the postverbal thematic subject is licensed.

Thus the locative inversion constructions in (1) and (2) illustrate some of the core theoretical questions about A-properties that arise in Bantu languages, centered on issues on agreement, licensing, and locality. §2 surveys Bantu agreement phenomena and their relationship to linguistic theory. §3 turns to DP-licensing, mainly Case but also focus, and §4 locality and inversion. All three of these domains have important implications for central architectural issues in Minimalist theory. In §5 we survey issues regarding the intersection of syntax and information structure, and §6 briefly sketches issues in A'-morpho-syntax. §7 concludes. As with any overview, the best we can do is point to the relevant empirical patterns and ongoing theoretical debates, leaving it to the reader to further explore the literature for a comprehensive picture of the issues at hand.

2 Bantu agreement

2.1 The empirical landscape

Bantu agreement phenomena are of interest for several reasons. First, there is the apparent difference in directionality of valuation already mentioned, in cases like (1)b vs. (2). Second, Bantu languages often exhibit some unusual liberality regarding the distribution of agreement: most functional categories can bear agreement morphology in Bantu languages, as illustrated in overt agreement of complementizers with *wh*-phrases (see (3)). Similarly, (4) shows multiple instances of subject agreement on multiple verbal elements, which is widespread in Bantu languages (as seen in (4)a-c) but illicit in familiar Indo-European (I-E) languages, as seen in (4)d.¹ Agreement morphology frequently shows up in places that are completely unexpected from a Western standpoint – even, in some languages, on the question word ‘how’ (see (5)).

(3) Ekihi **ky**-o Kambale a-alangira? [Kinande; Schneider-Zioga 2007]
 7what 7AGR-that Kambale 3SG-saw
 ‘What did Kambale see?’

(4) a. *pro* **khu**-b-ere **khu**-irukha. [Lusaamia; Carstens 2011]
 1pl-be-PST 1pl-run
 ‘We were running.’

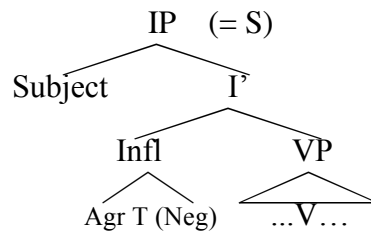
¹ Note that the Kilega example in (4)b, from Kinyalolo 1991: 238, is a locative inversion construction; multiple SA with locatives is but one among several canonical subject properties that locatives (and other inverted expressions) exhibit. Others include reversals of binding relations; see Ndayiragije (1999) on this important diagnostic.

2.2 Bantu and agreement theory

Approaches to agreement within mainstream syntactic theory have evolved a great deal over time. This development has informed and been informed by work on Bantu phenomena, which provide excellent testing grounds for hypotheses and challenges spurring theoretical innovation.

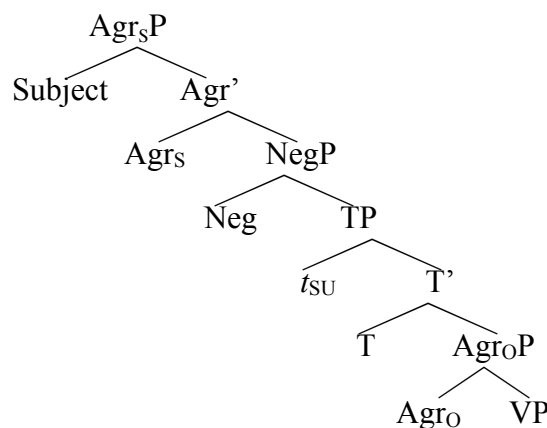
In early transformational grammar, there was scant attention given to agreement – a state of affairs that has fortunately been thoroughly upended in recent decades. Chomsky (1965) provided a mechanics for spreading gender, number, and Case features from nouns to determiners, but such issues were not reflected in mainstream syntactic theory thereafter for the next 30+ years. Consider the representation of clauses in the Government & Binding (GB) era (see Chomsky 1981). Subject agr(eement) was depicted as one among several features dominated by Infl (see (8)). The Bantu facts in (3) - (5) provide striking evidence that there is more to the story. While (8) was surface-compatible with English phenomena, it falls short as a proposal about Universal Grammar as it has nothing to say about this kind of cross-linguistic variation.

(8) Chomsky (1981)



Based on indications from French word order that there are more clause-level head-positions than V and I, Pollock (1989) proposed the existence of an Agr(eement) Phrase in Universal Grammar. Chomsky (1992) builds on this to suggest the presence of two AgrPs: Agr_SP for subject agreement, and Agr_OP for object agreement. Chomsky's (1992) interpretation of their locations is illustrated in (9). Like the GB approach to agreement, this proposal, which became the mainstream approach to agreement until Chomsky 1995, seems ill-equipped to address the Bantu agreement phenomena in (3)-(5) in a meaningful way.

(9) Chomsky (1992)
(adapting Pollock 1989)



Demuth and Gruber (1995) present a proposal reconciling Bantu multiple subject agreement with (9). Assuming that in both Bantu and English all auxiliaries are instantiations of T, they argue

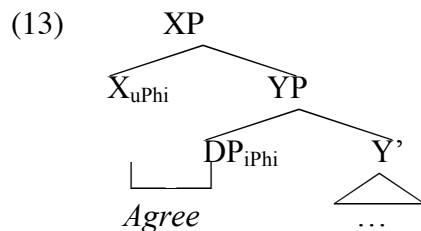
(12) [_{IP} Yosefu_q [_{I'} a_q-ka-yenda]]
 Joseph AGR-PRES-leave
 'Joseph left.'

[Kinande]

(Schneider-Zioga 1988:13)

In an inversion of the under-generation problems associated with (8) and (9), the Spec, head approach does well enough for Bantu as to make one wonder why every language does not have similarly abundant agreement. A full understanding of Bantu agreement and its theoretical implications requires an answer to this major point of parametric variation.

A couple of important developments in Minimalist agreement theory have provided valuable tools with which researchers have tackled the question of what underlies the difference between Bantu languages and a language like English. The work has been greatly influenced by Chomsky's (1995, 2000, 2001) proposal that agreeing heads bear unvalued, uninterpretable features of person, number, and gender -- the so-called phi-feature (hence uPhi) *probes*. In the relation called Agree, these probes obtain values from a *goal* DP which has valued, interpretable versions of the same features, and which is the closest c-commanded expression to the uPhi.



Agree does not entail any particular number or location of agreeing elements per clause, but ancillary factors are assumed to effect limitations on this, and thus constitute tools for addressing the contrast between Bantu and English agreement as will be discussed below.

2.3 Parametric variation: factoring in Case

Chomsky (1995, 2000, 2001) argues that agreement and Case are reflexes of the same Agree relation: when it values uPhi on a head X, Agree values uCase on the nominal expression that is agreed with. This is one of the ancillary factors constraining agreement that we mentioned above. Taken as a universal, it is at odds with the liberal distribution of agreement in Bantu languages, as Carstens (2001) points out. But taken as a statement about a subset of languages including English, it has proved a valuable tool for approaching parametric variation.

Baker (2003, 2008) proposes that the key factor setting apart Bantu agreement from its Indo-European counterparts is its independence of Case (see also Collins 2004 and Carstens 2005). Details and minor differences aside, Baker (2003,2008), Carstens (2005), and Collins (2004) suggest that there is parametric variation in whether phi-feature agreement forms a "bundle" with Case-licensing features. The claim is Case is bundled with phi-features in English (and similar Indo-European languages), but not for Bantu languages. This difference is argued by the above authors to be why heads in Indo-European languages can agree only with nominal expressions that acquire Case values from them, whereas heads in Bantu languages are not similarly constrained -- they can agree with whatever nominal expression winds up most local to them (in

hierarchical terms), whether or not a Case connection holds. The insight that agreement is more abundant and flexible in Bantu because of its independence of Case has sparked and influenced much subsequent work dealing with agreement and licensing in Bantu morpho-syntax (see Carstens 2011, Diercks 2012, Halpert 2013, van der Wal 2015c among others).

Carstens (2010, 2011) builds on this idea, proposing that while Case-independence is crucial to understanding *hyperagreement* and *hyperactivity* in Bantu, a parameter on the relationship between Case and agreement is not necessary because cross-linguistically, agreement that includes the feature of grammatical gender is always independent of Case (see (14)a). In Romance languages, concord inside DPs and past participle agreement (PPA) with unaccusative subjects show this, Carstens points out ((14)b). In the case of PPA, the deep object goes from an initial agreement relationship that does *not* value its Case (with the participial main verb) to a second one (subject agreement on the auxiliary) that *does* Case-value.²

- (14) a. **Case Independence of Gender Agreement (CIGA):** [Carstens 2011: 729]
 Agreement that includes grammatical gender features is not restricted to contexts where Case is valued.
- b. *la petite fille est tombee.* [Carstens 2010 : 47]
 D_{fem} small.fem girl(fem) be.3S fall.fem
 ‘The little girl has fallen.’

Carstens (2011) assumes that Bantu noun class comprises gender+number (Carstens 1991, Corbett 1991) and hence that Bantu multiple agreement reflects (14)a. Carstens argues that agreement in gender is Case-independent because gender is a meaningless formal feature (see also Boskovic 2011) and therefore satisfies the Activity condition of Chomsky (2001, et. seq):

- (15) The Activity Condition: each participant in an Agree relation must have an unchecked uninterpretable feature.

In English, following Chomsky, the canonical uninterpretable feature making DPs meet the Activity Condition in (15) is unvalued Case. Carstens argues that unlike Case, the gender/class features of nominal expressions have fixed values that Agree does not assign or alter. Simplifying somewhat, Carstens argues that nominal gender/class features are not "checked" and can therefore enable their bearers to participate in any number of Agree relations, unlike Case.³

² Chomsky (2000, 2001) addresses this in a different way, arguing that PPA does not value (“delete”) Case because PPA is not phi-complete, expressing only gender and number. Carstens (2001) points out that this proposal is flawed in that Romance subject agreement is not phi-complete either, as it omits person; yet in Chomsky’s analysis it still deletes Case. Baker (2008) proposes that participles and adjectives acquire Case-values from the expressions they agree with in IE, and that as long as a Case-valuation relation holds in one direction or the other, IE agreement is possible.

³ Unlike in Romance languages, clause-level agreement in Bantu, Semitic, and Berber languages always includes class/gender features (Carstens argues that the exclusion of gender features in Romance SA is the reason that Romance does not have hyperagreement). Carstens 2011 attributes this difference to the presence or absence of N-to-D adjunction, making N’s features uniformly accessible to heads outside DP. In Romance languages, the person feature of D blocks access to the lower gender feature of N for any probe sensitive to person.

2.4 Directionality of Agree

The previous subsection surveyed some approaches to the abundance and iterability of Bantu agreement. We turn now to the question of directionality.

Many Bantu languages have been shown to permit the highest thematic argument to surface *in situ*, allowing a different expression to raise to preverbal subject position as in the examples (1)b, (4)c, (6), and (7) (Kinyalolo 1991; Ura 1994, 1996; Collins 2004; Baker 2003; Carstens 2005; Zeller 2012, 2013; Halpert 2015; Diercks 2011). But few such languages permit agreement on T to track this low argument, instead maintaining agreement with the preverbal argument (as in the Chichewa locative inversion examples we started with).⁴ Consideration of such phenomena led Baker (2003), Collins (2004), Carstens (2005), and Baker (2008) all to propose some version of the idea that heads in Bantu languages can only agree with a phrase that is structurally higher than it.

Details differ among the above-cited approaches: Collins (2004), Baker (2003), and Carstens (2005) claim that Agree probes downward but is bundled with EPP in Bantu rather than Case, meaning that agreement is linked with movement, rather than Case-licensing. In contrast, Baker (2008) proposes that as a parametric choice, Agree in Bantu (among other) languages probes upward. Thus it is only after EPP brings a phrase into a c-commanding position that a head can Agree with it. Baker's proposal has been influential, feeding a broad debate within Minimalist theory regarding the directionality of Agree. See Zeilstra (2012) and Wurmbrand (2012) (among others) for arguments that Agree always probes upwards; see Preminger (2013) and Diercks et al (to appear) for arguments against this.⁵

This remains an area of ongoing controversy, where approaches continue to differ based on conflicting evidence and interpretations of relevant facts. Carstens & Diercks (2013b) show that although Lubukusu agreement in general (and on the *wh*-phrase 'how' specifically) typically reflects the features of a c-commanding expression, agreement on 'how' can be valued by the postverbal thematic subject in a locative inversion construction (for the most part, this is the only option).⁶ They analyze agreeing 'how' as a *v*P-adjunct which downward-probes the highest expression therein. That expression usually lands in Spec, TP, but not always, as (17)b demonstrates. Carstens & Diercks conclude from this that the apparent upward directionality of this agreement is illusory, at least where Lubukusu is concerned, and a result of EPP and agreement features frequently coinciding.

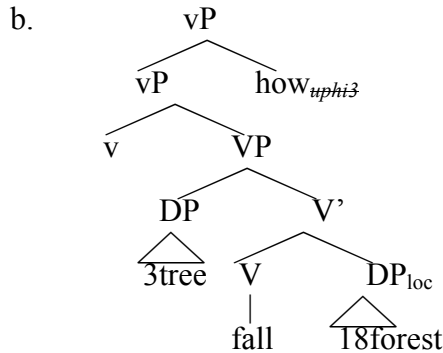
⁴ Van der Wal (2009), (2015) and Sheehan & Van der Wal 2016 discuss properties of Makhuwa and Matengo, which appear to systematically diverge from the broader Bantu agreement patterns here. See below for further discussion.

⁵ See also Bejar & Rezac 2009, Carstens 2016, Toosarvandani & van Urk 2014 for bidirectional approaches under which (glossing over some differences in implementation) a match for *uPhi* is automatically sought in the c-command domain of its bearer at Merge, but if one is lacking, valuation can "look upward."

⁶ For 2 out of 3 Lubukusu speakers in their study, this was the only option. The third speaker allowed 'how' to agree either with the postverbal thematic subject or with the preposed locative, in a second locative inversion construction that we will not discuss here. Given that in Lubukusu only thematically selected locatives can invert, and only unaccusative verbs can participate in the construction, Carstens & Diercks attribute this to an ambiguity in the Merge order of locative and theme arguments of unaccusatives; see C&D 2013b:211ff for details.

(16) Ki-mi-saala **ki**-a-kw-ile **ki**-rie(na)? [Lubukusu]
 4-4-tree 4SA-PST-fall-PST 4-how
 ‘How did the trees fall?’

(17) a. **Mu**-mu-siiru **mw**-a-kwa-**mo** ku-mu-saala ku-rie /***mu**-rie?
 18-3-forest 18SA-PST-fall-18L 3-3-tree 3-how/*18-how
 ‘How did a tree fall in the forest?’ (Lit: In the forest fell a tree how?)



There is at least one agreement construction in Bantu languages that strongly challenges downward-probing accounts, even with the various additional mechanics of Collins (2004) or Carstens (2005). Kawasha (2007) documents a complementizer agreement construction (CA) in Chokwe, Luchazi, Lunda, and Luvale (spoken in Zambia, Angola, and the DRC) where a complementizer heading an embedded declarative clause agrees with the main-clause subject. While research is still growing on this phenomenon, it is becoming clear that CA is relatively widespread in Bantu languages and even more broadly (Idiatov 2010, Kawasha 2007, Diercks 2013, Duncan and Torrence 2018, Safir and Letsholo 2018, Diercks and Rao 2017); (18) is Lubukusu, from Diercks 2010: 293).

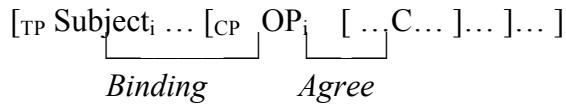
(18) Khw-aulile [CP **kh**u-li/***ba**-li ba-limi ba-funa ka-ma-indi.] [Lubukusu]
 1plSA-heard 1pl-that/2-that 2-farmers 2S-harvested 6-6-maize
 ‘We heard that the farmers harvested the maize.’

Diercks (2010, 2013) shows that the Lubukusu complementizer agrees strictly with the superordinate subject, ignoring lower clause subjects, superordinate clause indirect objects (see (19)a, from Diercks 2013: 369), causees in causative constructions, and demoted subjects in by-phrases. Diercks analyzes this as an Indirect Agree relation, where CA is triggered locally by a null anaphor which is obligatorily coreferent with the matrix subject (19)b from Diercks 2013: 372).⁷ Since the null anaphor is in Spec, CP and therefore c-commands agreeing C, this agreement relation is valued “upwards.”

(19) a. Ewe w-abol-el-a Nelsoni ***a**-/o-li ba-keni ba-rekukha. [Lubukusu]
 you 2sgSA-say-APPL-FV 1Nelson 1/2sg-that 2-guests 2SA-left
 ‘You told Nelson that the guests left.’

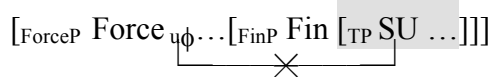
⁷ See Baker’s (2008) discussion of Kinande complementizer agreement for a precursor to these ideas.

b. Indirect Agree Analysis of Complementizer agreement in Lubukusu



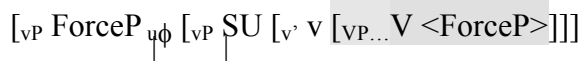
Carstens (2016) argues that a directionality parameter on Agree is unnecessary, and inconsistent with both a derivationalist approach to syntactic relations (Epstein 1999 among others) and the so-called Borer-Chomsky hypothesis that all parameters are properties of functional categories (Borer 1984, Chomsky 1995). Adopting the articulated left periphery of Rizzi (1997), Carstens (2016) proposes an alternative analysis under which agreeing C is Force⁰. This C is too high in the articulated left periphery to access the embedded subject via downward Agree, because a phase head just below Force⁰ triggers spell-out of the TP containing this subject (see (20), from Carstens 2016:19). Carstens argues that while an unvalued feature of a head H is automatically valued by a matching expression present in the c-command domain of H upon Merge, if no match is found there, then something merged higher in the same phase can provide a value (see also Bejar & Rezac 2009). This is what happens in the case of Lubukusu CA -- lacking an accessible valuer in its c-command domain, it is valued in the higher clause.

(20) *uφ of Lubukusu Force cannot probe the transferred subject of an embedded clause.*



Carstens argues that the subject-orientation of Lubukusu CA exists because an indirect object or causee cannot value CA since these arguments acquire dative Case in a local relation with Appl/Caus. This renders them inactive for Agree with the (more distant) agreeing C. In an instance of imperfection-driven movement (Boskovic 2007, 2011), edge features of (Appl and) v* raise the CP whose head bears uPhi across a dative argument to the edge of vP where it closest c-commands the subject, active until its Case is valued in Spec, TP.

(21) a. *Valuation of Lubukusu CA: ForceP inherits uφ of Force, which probes the matrix subject after an edge feature of v* raises ForceP.*

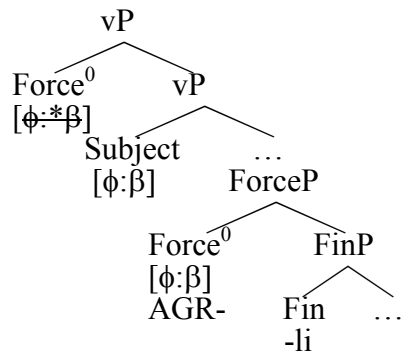


b. *An edge feature of v* can raise ForceP again, feeding downwards Agree (ForceP_{uφ}, SU)*



In contrast, Diercks et al (to appear) argue that some kinds of agreement have phi features that are anaphoric in nature, and that this is true of Lubukusu CA (which, like Carstens 2016, they assume manifests features of the high C, Force⁰, but affixed to *-li* = a lower C, Fin⁰). Anaphoric agreement resembles reflexives in consisting of unvalued, *interpretable* features; these necessarily move to a position higher than their antecedent, and undergo valuation via downward Agree. The resulting configuration resembles (21) except that only the head raises, as shown in (22) (* indicates a feature shared with the subject).

(22)



Recently, Safir and Letsholo (2018) have expanded the empirical base of the study of CA with Ikalanga and Kinande data, showing that in addition to tracking phi-features of the subject, an agreeing C may be sensitive to the active/passive Voice distinction and to tense/aspect features of the superordinate verb. The Ikalanga examples (23)a and (23)b contrast in that tense of the matrix verb, present in (23)a, is remote past in (23)b, and the complementizer *-ti* bears agreeing tense inflection in the latter case. One agreeing complementizer *-yi* must be c-commanded by passive in the immediately superordinate clause, as in (23)c.

- (23) a. nd-ó-dw-à Néó **ndi-tí** á-tèng-è lóri.
1SSA-PRES-tell-FV Neo 1SSA-that 3SSA-buy-SBJ c9.car
'I am telling Neo to buy a car.'
- b. (imi) nd-à-ká-dw-à Nchídzi **ndí-kà-tí** á-téng-é lóri.
I 1SSA-PST1-PST2-tell-FV Nchidzi 1SSA-PST2-that 3SSA-buy-SBJ 9car
'I told Nchidzi that he should buy a car.'
- c. ìmì nd-à-ká-dw-íw-à **ndi-yí** Mary à-á-tó-ndí-d-á.
I 1SSA-PST1-PST2-tell-PASS-FV 1SSA-that Mary NEG-3SSA-1SOM-like-FV
'I was told that Mary did not like me.'

Safir and Letsholo propose that agreeing CP extraposes and adjoins to VoiceP. This places it in the same phase as T (as well as local to Voice).

(24) [_{TP} ... T [_{VoiceP} [_{VoiceP} ... (EA) [_{vP} v [_{vP} ... <CP>] [_{CP} AGR-C [TP]]]]]

The growing consensus of analyzing agreeing C(P)s as moving to the edge of the superordinate vP finds some justification in the non-Bantu language Kipsigis (Nilotic, Kenya), which shows that agreeing complementizers may raise into the matrix clause overtly, replacing the verb in some instances (this is transparent in Kipsigis because it is a verb-initial language: see Diercks and Rao 2017 and Diercks et al to appear for more details).

In-depth research on complementizer agreement is a recent development, in its early stages; additional diversity undoubtedly awaits discovery. CA is proving a rich source for research on the properties of agreement, locality, and related concerns. Given that CA does not reflect a uniform set of features, a question that comes up is whether a unified analysis is possible. This and other questions await future research.

2.5 Summary

We end this section optimistic about the conjecture with which we began it, namely that the richness of Bantu agreement phenomena affords extraordinary insights into the nature of agreement and the core mechanisms which produce agreement. Research on Bantu languages has already done a great deal to illuminate agreement's workings. As the emerging studies of complementizer agreement demonstrate, new phenomena continue to be recognized and explored, and further progress to be made.

3 Case and DP Licensing in Bantu Languages

3.1 Theoretical preliminaries

An important ongoing debate in the analysis of Bantu syntax has to do with DP-licensing, that is, the factors that determine the distribution of overt nominal expressions. In mainstream syntactic theory, abstract Case is accorded a crucial role in this.⁸ Chomsky 1981 proposed the Case filter in (25) to capture a range of distributional phenomena.⁹

(25) *NP if NP has phonetic content and has no Case.

Consider the degraded status of (26), in which the direct object of an English passive verb appears in situ. The intended meaning of (26) can be licitly expressed by either making the verb active in which case its object is accusative ((27)a), or raising the object of the passive verb to the surface subject position, in which case it bears nominative ((27)b).

(26) *It/there was believed the boy/he/him.

(27) a. People believed the boy/him.
b. The boy/he was believed.

Assuming (25), the unacceptability of examples like (26) is standardly attributed to an absence of Case for the object of a passive verb. In the terminology of GB theory, passive verbs do not assign Case to their objects. In contrast, active verbs assign accusative to their DP complements, and tensed Infl/T assigns nominative to a DP in its specifier position.

Similarly, following Chomsky 1981, examples such as (28) and (29) are unacceptable because Case is unavailable in the preverbal subject position of infinitives. As (30) shows, example (28) can be repaired by the addition of *for*. The acceptable pronominal subject shows that when *for* is present, the subject is accusative.

(28) *[_S John/he/him to leave] would surprise Mary.

⁸ Here we follow the convention of distinguishing the upper-case abstract "Case" (which by hypothesis licenses nominals, per (25)) from the lower-case morphological "case," i.e. the actual morphology that appears on nominals to mark grammatical function (which often coincides with the nominal's Case but not necessarily so).

⁹ Chomsky (famously) credits Jean-Roger Vergnaud for the original idea (Chomsky 1981:53). The relevant licensing property is termed 'Vergnaud Licensing' by Sheehan and van der Wal 2016b, following Pesetsky 2014, to sidestep the confusion introduced by the widely-used term case/Case. There is considerable controversy about the relationships among morphological Case, abstract Case, and licensing which we will not go into here.

(29) *It seems [_S John/he/him to have left].

(30) [_S For [_S John/him/*he to leave]] would surprise Mary.

Licit versions of (29) either have tensed embedded clauses as in (31)a, or raise the subject out of the embedded infinitival into the subject position of the higher, tensed clause as in (31)b.

Subject-to-subject raising is impossible out of English tensed clauses as shown in (31)c. While specifics have evolved over time, it is standardly assumed that a DP which has acquired Case is generally excluded from any relation that would give it Case again.¹⁰

- (31) a. It seems [_S that John/he has left].
b. John/he seems [_S ___ to have left].
c. *John/he/him seems [_S ___ has left]

Summing up, Case varies by position, as the choice of English pronouns in these examples illustrates. In certain positions – object of a passive verb, or subject of an infinitive not introduced by *for* – nominal expressions are illicit. Following Chomsky 1981, this fact came to be attributed to (25), assuming there is an absence of Case for nominal expressions in these positions.

3.2 The empirical issues

As has been observed since Harford (1985), nominal expressions in many Bantu languages do not show the distributional properties that are expected based on the languages for which Case Theory was first developed. For example, Harford shows that movement to subject position in passives is optional in Shona (Harford 1985: 49), so in these so-called *impersonal passives* the object remains postverbal. She points out that on the GB-theoretic assumption that objects of passives must raise to be assigned Case, this is unexpected.

- (32) Kw-á-uray-iw-a mu-rúmé né-shumba ku-ru-kova. [Shona]
17S-PST-kill-PASS-FV 1-man by-9lion 17-11-river
'There was a man killed by a lion at the river.'

In the example above, subject marking on the verb shows default features, so not only does the subject surface in a position that is traditionally viewed as lacking Case-licensing, it is not agreed with. As we saw in the previous section, Minimalism views an Agree relation as a necessary condition for Case-valuation.

Harford (1985:2-5) also notes that verbs that embed complement clauses allow (optional) raising of an embedded subject out of a tensed clause, where nominative is typically assumed to be assigned (or in current terms, valued). Hence counterparts to (31)c are acceptable. This is unexpected, from the standpoint of Case-theory.

- (33) a. [_{IP} *pro*_{EXPL} Zví-no-fungir-wa [_{CP} kuti [_{IP} mbavhá y-aka-vánd-á mú-bako]]].
8EXPL 8S-PRS-suspect-PASS that 9thief 9-FAR.PAST-hide-FV 18-cave
'It is suspected that the thief is hidden in the cave.'

¹⁰ There is some variation on this point – see Bejar and Massam (1999) on multiple case checking in a range of languages, Richards (2013) on case stacking in Lardil.

- b. [_{IP} Mbavhá_i i-no-fungir-wa [_{CP} kuti [_{IP} t_i y-aka-vánd-á mú-bako]]].
 9thief 9S-PRES-suspect-PASS that 9S-FAR.PAST-hide-FV 18-cave
 ‘The thief is suspected to be hidden in the cave.’

Based on these factors, Harford (1985) claims that abstract Case is not active in Bantu grammar. Baker (2003) claims that Kinande does not Case-license DPs based on arguments he makes that they may occur only in clause-external, adjoined positions. Baker (2008:182) even wonders in passing “if Case assignment happens in Bantu at all.”

3.3 A Case Parameter (Diercks 2012)

Diercks (2012) replicates Harford’s evidence that DPs in a variety of Bantu languages appear in positions from which they are barred in English, for Case-theoretic reasons, and confirms that they may raise out of tensed clauses where one would expect them to receive Case. In addition to Harford’s argument from impersonal passive exemplified in (32), he notes the Case-theoretic problem that is presented by postverbal subjects in locative inversion constructions, which are not agreed-with and occur *in situ* within the vP (as noted above with respect to (1); and see also Baker 2003, 2008, Carstens 2005, 2011, Collins 2004, and Henderson 2007 for discussion of this problem). Diercks also points out that some constructions allow for overt subjects of non-finite clauses as illustrated in (34) and (35) below (Diercks 2012:7-9). Diercks shows that an Exceptional Case Marking or Raising-to-Object account is not feasible of these clauses (when in complement clause position as in (34) their subjects can’t be object marked on the matrix verb, in contrast to ECM predicates, and they may occur as sentential subjects, as in (35), again in contrast to ECM clauses).

- (34) Ka-nyal-ikhana Sammy khu-khila ku-mw-inyawwe o-kwo.
 6s-possible-STAT 1Sammy INF-win 3-3-game DEM-3
 ‘It is possible for Sammy to win the game.’

- (35) Sammy khu-khila ku-mw-inyawwe o-kwo khu-la-sanga-sya mawe. [Lubukusu]
 1Sammy INF-win 3-3-game DEM-3 15S-FUT-please-CAUS mother.his¹¹
 ‘For Sammy to win the game will please his mother.’

As Diercks points out, morphological evidence for Case is also lacking in Bantu languages. There is nothing like the nominative-accusative distinction that we saw in the English examples of 3.1, correlating with particular clausal positions. Diercks concludes that abstract Case plays no role in Bantu languages. The presence or absence of abstract Case is a parametric choice that languages make:

- (36) Case Parameter: Uninterpretable Case features are/are not present in a language

According to Diercks (2012), the parameter is set to the negative value for Bantu languages, explaining the lack of expected Case-related constraints on DP-licensing.

¹¹ The class 15 subject marker agrees with the infinitive marker here (infinitive morphology has traditionally been considered to fall within the Bantu noun class system, as it serves a nominalizing function, part of which is the ability to trigger noun class agreements).

3.4 Hyper-raising

Bantu Case-anomalies continue to stimulate theoretical research, especially subject-to-subject raising out of tensed embedded clauses like (33)b and (37) (Harford 1985; Zeller 2006; Carstens and Diercks 2013a; Halpert 2012, 2016, 2017; Mountjoy-Venning and Diercks 2016; among others). These are the so-called “improper movement” or hyper-raising constructions that are ruled out in English (*Alex seems Alex to hate Chipotle* vs **Alex seems that Alex hates Chipotle*). In the Minimalist framework of Chomsky (2000,2001) the ban is doubly-accounted for. Improper movement violates the Activity Condition in (15), which requires participants in Agree relations to have uninterpretable features that have not been valued or “checked.” A prohibition on movement out of CP into an argument position out of Cs further disallows improper movement (see the Phase Impenetrability Condition of Chomsky 2001).

Carstens and Diercks (2013a) demonstrate that Lubukusu and Lusaamia permit hyper-raising and allow a full range of tense/aspect distinctions in the embedded clause of hyper-raising constructions (see the far past, recent past, and future examples in (37)), suggesting that the lower clause is in fact a typical finite (tensed/agreeing) clause, unlike the exclusively non-finite source clauses of English raising.

- (37) 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 & Diercks (2013a) also show that Luyia hyper-raising permits ‘reconstructed’ readings in which the surface subject of the matrix clause is construed entirely in the embedded clause, in contrast to so-called copy-raising constructions like *John seems like he is sick*, which require the subject of ‘seems’ to be the “perceptual source” (see Landau 2011, Potsdam and Runner 2001). Halpert (2012, 2016) shows in examples like (38) that hyper-raising constructions in Zulu preserve idiomatic readings for whole-clause idioms that are (by assumption) merged as a unit in the lower clause.¹² Like the reconstructed readings, this diagnostic indicates that hyper-raising constructions are true raising (i.e. generated via movement) and not copy-raising *seems as if* type constructions, base-generated with a null subject in the lower clause.

- (38) Iqhina li-bonakala [ukuthi li-phum-ile embizeni] [Zulu]
 5.steinbok 5SA-seems that 5SA-exit-pst LOC.9pot
 ‘The steenbok seems to have exited the pot.’ (literal)
 ‘The secret seems to have come out.’ (idiomatic) (Halpert 2016)

¹² The same is shown for Logoori in Mountjoy-Venning and Diercks (2016), and has also been documented for Tiriki in Diercks and Hernández (2018) and Shona in Carstens and Diercks (2013c).

- (39) mu-doga ga-roreka [(ndi) ~~mu-doga~~ gu-simuk-i] [Logoori]
 3-car 6SA-seems (that) 3SA-depart-PST
 ‘The car seems to have departed.’ (literal)
 ‘It appears to be too late.’ (idiomatic) (Mountjoy-Venning & Diercks 2016: ex 17)

Hyper-raising constructions pose a number of serious theoretical challenges, including their hyperactivity/hyperagreement properties (discussed in §2.1 above), and phase-theoretic questions (see Carstens & Diercks 2013a,b,c, Halpert 2017). Ongoing work continues to uncover new properties of hyper-raising: for example, it appears that many languages have a non-agreeing raising construction where the embedded subject raises to matrix subject position, but the matrix verb bears a distinct agreement morpheme, failing to agree with the subject (see Halpert 2017, Mountjoy-Venning and Diercks 2016, Diercks and Hernández).

- (40) **uZinhle_i** **ku**-bonakala [ukuthi t_i u-zo-xova ujeqe] [Zulu]
 AUG-1Zinhle_i 17S-seem that t_i 1S-FUT-make AUG.1steamed.bread
 ‘It seems that Zinhle will make steamed bread.’

In a series of work leading up to and including Halpert (2015), Halpert convincingly demonstrates that such non-agreeing raising constructions in fact move the subject to canonical subject position, despite the unexpected lack of subject agreement on the verb. Mountjoy-Venning and Diercks (2016) confirm these findings for Logoori non-agreeing raising, and Diercks and Hernandez (2018) find the same for Lutirichi. Halpert (2016, 2017) analyzes this as agreement with the embedded CP (an operation thought to specifically enable raising out of the finite CP), while Diercks and Hernandez (2018) analyze it as agreement with a null expletive, proposing instead that A-movement out of finite CPs is not strictly prohibited. There is much to still be investigated and the work is ongoing, bearing on many significant theoretical issues (not least of which is the properties of phases and how movement is possible out of a finite CP).

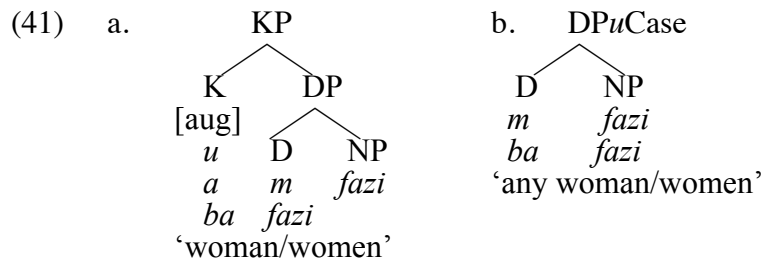
Under Harford (1985) and Diercks (2012), Case does not constrain subject-to-subject raising in Bantu languages as it does in English. Much (though not all) about the puzzling properties of Bantu hyper-raising follow. As discussed below, there are some reasons to doubt that a Case Parameter is the best way to capture the DP-licensing anomalies in Bantu languages. On the other hand, abandoning it leaves many questions open regarding DP-licensing in general and the status of hyper-raising in particular.

3.5 Further Case-theoretic developments

The claim that all Bantu languages lack Case has been contested by van der Wal (2015c) and Sheehan and van der Wal (2016a,b) who show that two Bantu languages of Mozambique (Makhuwa and Matengo) lack the qualities that Diercks relied on to propose that Bantu selects a negative value for his Case Parameter. As van der Wal notes, however, this state of affairs indirectly supports the Case Parameter, because assuming Makhuwa and Matengo do have abstract Case provides an explanation for why they differ from the Bantu languages Diercks (2012) relies on.

In contrast, Halpert (2012, 2016) argues that Zulu—a language with the full set of Case anomalies described in Harford (1985) and Diercks (2012)—does in fact have abstract Case, and therefore that Diercks (2012) may be on the wrong track. The anomalies nonetheless arise because Case-theoretic restrictions only emerge in connection with bare nominals in the language, which serve as *wh*-phrases and negative polarity items, and lack the so-called augment vowel or pre-prefix (see Halpert, this volume).

Halpert argues that the augment is a Case-licensing morpheme (K in (41)). In its absence, Case-licensing needs restrict augmentless nominals to *vP*-internal positions, local to one of three downwards Case-licensors: L (a Licensing head), Appl, or Caus (the latter two being heads of functional categories associated with applied and causative morphology). Thus augmentless nominals cannot appear in preverbal subject position as shown in (42)a, and only one augmentless nominal is possible *vP*-internally unless the verb bears applicative or causative morphology (see (43)a versus (43)b). Zulu nominal licensing contexts are represented schematically in (44)a,b.



(42) ***Augmentless nominals in preverbal subject position**

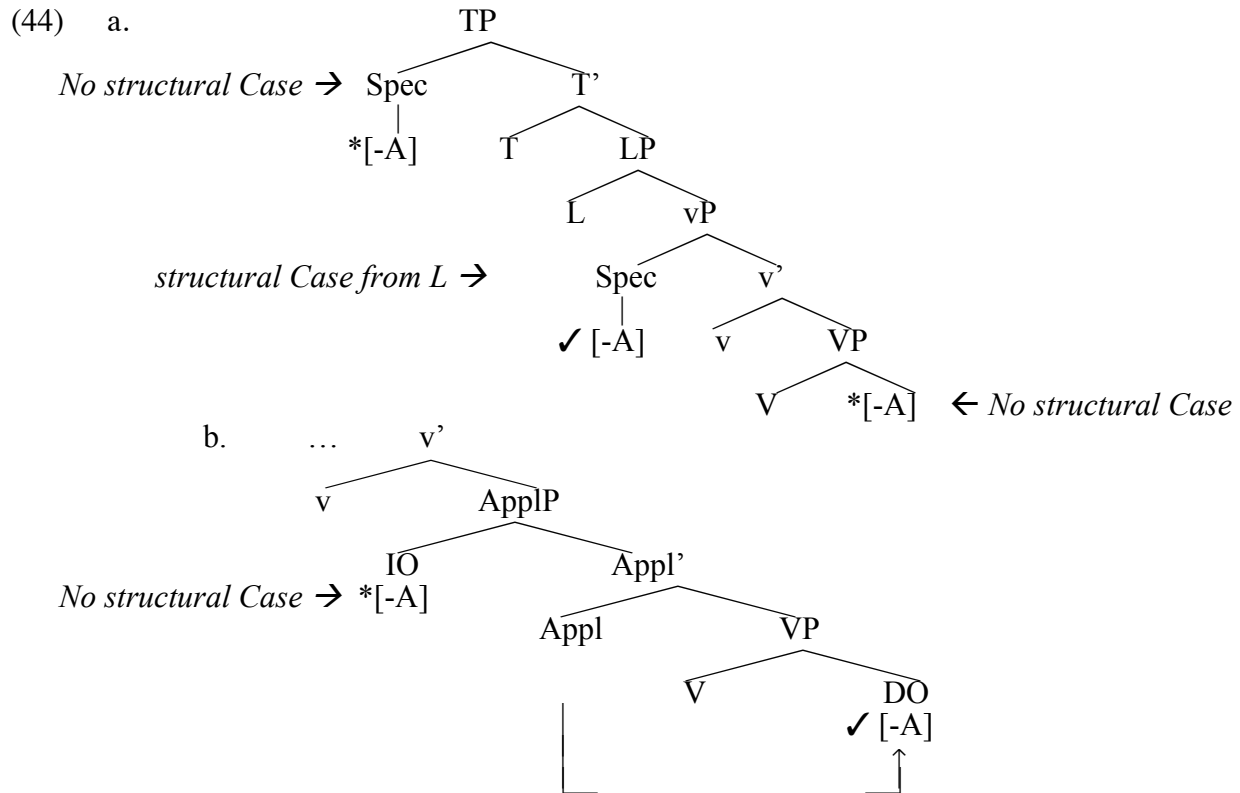
- a. *A-*ngi-sho-ngo* [ukuthi **muntu u-** fik-ile]
 NEG-1sg-say-NEG.PAST that 1person 1s-arrive-PST
 ‘I didn’t say that anyone came.’
- b. A-*ngi-sho-ngo* [ukuthi ku-fik-e **muntu**]
 NEG-1sg-say-NEG.PAST that 17s-arrive-PST 1person
 ‘I didn’t say that anyone came.’

(43) a. ***VSO augmented-augmentless**

*A-*ku-phek-anga* (u-)muntu qanda
 NEG-17SA-cook-NEG.PAST AUG-1person 5egg
 [Intended: Nobody cooked any egg]

b. **OK: VSO augmented-augmentless-augmentless**

A-*ku-thum-el-anga* muntu *(i-)zingane mali
 NEG-17SA-send-NEG.PAST 1-1person *(AUG-)10child 9money
 ‘Nobody sent the/any children any money’



Summarizing, Halpert's proposals re-introduce the possibility that Case-Licensing might be present in Bantu languages which exhibit the full array of Case-theoretic anomalies that Harford (1985) and Diercks (2012) describe, but may simply be obscured in many instances.

Carstens and Mletshe (2015, henceforth C&M15) adopt a version of this general view, arguing that there exist both semantically-linked inherent Cases and structural Cases in Xhosa. Their claims are based on properties of Xhosa T(ransitive) E(xpletive) C(onstructions) (see (45) and (46)), which are agreement-free VSO constructions with obligatory subject-focus interpretations. C&M15 show that Xhosa experiencer verbs with two full DP arguments may not participate in TECs (see (46)), and note a parallel in Ukrainian (see (47)) which Lavine 2010 relates to Case and event structure: the experiencer verb 'surprise' may not participate, unlike the agentive verb 'pierce.'

(45) a. Ku-phek-a u-Sindiswa a-ma-qanda. *Subject focus obligatory in TECs*
 17SA-cook-FV 1-1Sindiswa 6-6eggs
 'It's **Sindiswa** who cooks eggs.'

b. A-ku-theng-anga m-ntu /u-Sabelo u-kutya.
 NEG-17SA-buy- NEG.PST 1-person /1-1Sabelo 15-15food
 'Nobody bought (the) food!'/Sabelo didn't buy the food.'

(46) a. *Kw-a-bon-a u-m-fazi i-ntaka. **TEC of an experiencer verb with full DP arguments*
 17SA-PST2-see-FV 1-1-woman 9-9bird
 [Intended: (It was) **a/the woman** (who) saw the bird]

- b. *A-ku-cing-anga m-ntu u-kutya.
 NEG-17SA-think-NEG.PST I-person 15-15food
 [Intended: **Nobody** thought of (the) food]

- (47) a. *Ivana bulo zdyvovano blyskavkoju. b. Kulju rozirvano evjaxom.
 Ivan.ACC was surprised lightening.INSTR balloon.ACC pierced nail.INSTR
 ‘Ivan was surprised by lightening’ ‘The balloon was pierced by a nail’

C&M15 advocate an analysis of the Xhosa facts in terms of inherent Case.¹³ By way of support, they point out that arguments of experiencer predicates often bear inherent Cases, in languages with overt Case-marking (see (48)). Moreover, it is known that structural but not inherent Cases may licitly be replaced with semantically linked, non-canonical Cases. This accounts for the contrast between (49)b and (50)b: the Russian genitive of negation may replace accusative on the object of ‘buy’, but not inherent dative on the object of ‘help.’

- (48) a. Ti-la rag ala. [Marathi] b. Hamraa ii naa miilal. [Bhojpuri]
 she-DAT anger came I-GEN.OBL this not find
 ‘She got angry’ ‘I didn’t find it’

- (49) a. Saša pokupaet knigi.
 Sasha.NOM buys books.ACC
 ‘Sasha is buying books.’
 b. Saša ne pokupaet knig.
 Sasha.NOM NEG buys books.GEN.NEG
 ‘Sasha doesn’t buy (any) books.’

- (50) a. Ja ne pomagaju nikakim devuškam.
 I NEG help no girls.DAT
 ‘I don’t help any girls.’
 b. *Ja ne pomagaju nikakix devušek.
 I NEG help no girls.F.GEN
 ‘I don’t help any girls.’

C&M15 propose that a middle-field Focus head gives Case-values to the [+/-Focus] arguments in a Xhosa TEC, under local structural relations. Like the genitive of negation in (50)b, this is impossible for arguments of experiencer verbs under (51), because they already bear inherent/semantic Cases.

(51) **The semantic Case constraint:** *DP bearing more than one semantically-linked Case.

¹³ C&M show that the Xhosa prohibition on experiencer verbs in TECs is surmounted if the internal argument is a CP, or if both arguments are augmentless. On this basis they claim that Case and not event or argument structure underlies the facts, assuming that the focus-linked Cases are semantically linked but structural (like the Russian genitive of negation), and that structural Case values (including the non-canonical Cases conferred by Focus) are relevant to full (augmented) DPs alone.

3.6 Information structure and DP positions

Various works have also argued that a clausal topography of information structure impacts the distribution of nominal expressions, in certain Bantu languages, and that this may have bearing on the Case debate (Carstens & Mletshe 2016, henceforth C&M16, van der Wal 2017 among others).

There is a long history of proposals that the preverbal "subject" position in Bantu has topic properties, and that this constrains what may surface there. One well-known source of evidence is that *wh*-phrases and other focal material cannot appear as S in an SVO construction in Nguni and other southern Bantu languages, often surfacing postverbally instead (examples in (52) are from Zeller 2008, and see Demuth 1990, Zerbian 2006, van der Wal 2009, Sabel and Zeller 2009, Buell 2006, Cheng and Downing 2012, Kinyalolo 1991, Baker 2003, Schneider-Zioga 2007 among others on these restrictions).

- (52) a. *[U-John **kuphela**] u-fik-ile. [Zulu]
 1-1John only 1.SM-arrive-DISJ1
 [Intended: Only John arrived.]
- b. *U-bani u-phek-ile?
 AUG-1a.who 1.SM-cook-PST.DISJ1
 [Intended: 'Who cooked?']
- c. Ku-fik-e bani?
 EXPL17.SM-arrive-PST who1a
 'Who arrived?'

Zeller (2008), Zeller (2009), and Sabel & Zeller (2006) characterize the preverbal subject position in Zulu as anti-focus.¹⁴ C&M16 argue that in Zulu and Xhosa TEC constructions, O of [VSO(O)] is also anti-focus (see the Zulu (53) from C&M16:790), as are (clitic-) dislocated expressions (as noted in Zeller 2008; see (54); C&M16:791).¹⁵

- (53) a. *Ku-thum-el-é u-Sindiswa (**u-**)bani i-zi-ncwadi? [Zulu]
 17SA-send-APPL-CONJ1 1-1Sindiswa (1-)1who 10-10-books
 [Intended: Who did Sindiswa send books to?]
- b. *Ku-theng-é u-Sindiswa [a-ma-qanda **kuphela**]. [Zulu]
 17SA-buy- CONJ1 1-1Sindiswa 6-6-eggs only
 [Intended: Sindiswa bought only eggs.]
- (54) *U-m-bon-ile]_{VP} (**u-**)bani? [Zulu]
 2sSA-3sOM-see-DISJ (1-)who
 'Who did you see?'

¹⁴ More precisely, Zeller argues that the subject marker gives rise to the antifocus effect: it raises out of the subject "big DP" and hence the lexical preverbal subject is like a clitic-doubled expression, unable to have a focused interpretation.

¹⁵ They show that O of VSO is somewhat weakly so, but O1 of VSO1O2 is strongly anti-focus.

4 Locality puzzles in Bantu Languages

As previously mentioned, striking inversion constructions exist in many Bantu languages (we refer the reader to Diercks 2017, Salzmann 2011, Demuth and Harford 1999a, and Marten and van der Wal 2015 for relevant overviews). Some of these have familiar parallels; for example, a well-researched subject-verb inversion in Swahili relative clauses (Barrett-Keach 1980; Ngonyani 1999, 2001) resembles subject-verb inversion in standard American English questions (*Where is Tania ~~is~~ going?*). What stands out in Bantu languages as comparatively unusual is the existence of inversions involving apparent A-movement of one DP raising over another, c-commanding DP.¹⁷ These add a movement-theoretic dimension to the agreement and Case evidence that A-relations in Bantu differ significantly from their counterparts in IE languages. Some researchers have sought unified approaches, while others have focused more narrowly on inversion phenomena.

This section surveys two major classes of inversion constructions: inversions to subject (§4.1), and inversion in double object constructions, within the verbal domain (§4.2).

4.1 Inversion to pre-verbal subject position

As mentioned in section 1, inverted locatives exhibit canonical subject properties in a number of Bantu languages. Kinyalolo 1991 provides morphological evidence, demonstrating that agreement with a preposed locative phrase is expressed in a morpheme to the right the negative morpheme *ta-* in Kilega (see (57)). This contrasts with the pre-negation position of agreement with *wh*-operators, and instead is identical to the position of agreement with canonical preverbal subjects (see (58) and (59)). Recall also from (4)b that inverted locatives may control multiple subject agreement in Kilega (and other Bantu languages). Some Bantu languages permit transitive LI, as in the Kilega (4)b and Digo (60).

(57) a. Mu-zízo nyumbá **ta-mú**-ku-nyám-a bána wálúbí. [Kilega]
18-IOthat 10house NEG-18SA-FUT-sleep-FV 2child one.day.period
'There will not sleep children in those houses tomorrow'

b. *mu-zízo nyumbá **mú-ta**-ku-nyám-a bána wálúbí

(58) a. Kúní **kú-ta**-ku-yan-ág-á bána mu-kindí?
17where 17CA-NEG-PROG-play-HAB-FV 2child 18-7night
'Where don't children usually play at night?'

b. *Kúní **ta-kú**-ku-yan-ág-á bána mu-kindí?

(59) a. Bána **ta-bá**-ku-kíta-ag-a bubo.
2child NEG-2 SA-PROG-do-HAB-FV 14that
'Children don't usually do that.'

¹⁷ There is apparent A-scrambling in some non-Bantu languages sharing this property (see, for example, Miyagawa 2010; Mahajan 1990, 1994; McGinnis 1999). Bantu languages are not generally considered to have the robust scrambling that is documented in languages like Japanese, Hindi, and Russian, though perhaps a stronger link deserves to be investigated.

b. *Bána bá-ta- ku-kíta-ag-a bubo.

- (60) Mo chumba-ni mu-na-andika mutu baruwa [Digo; Diercks 2012:15]
 18DEM room-18LOC 18S-CONT-write 1person 9letter
 ‘Someone is writing a letter in the room.’

In the construction sometimes referred to as Subject-Object Reversal (SOR), OVS word order surfaces in canonically SVO languages. The inverted object controls subject agreement, and a focus interpretation is common for the postverbal, thematic subject as in the Kirundi (61)b. Ndayiragije (1999:421) provides an argument from Weak Crossover Effects (WCO) that the inverted object is in an A-position, as is the canonical subject of an SVO sentence: it is unacceptable for a pronoun within either kind of preverbal DP to bind a quantifier to its right.

- (61) a. Abâna ba-á-ra-nyôye amatá. [Kirundi: SVO]
 children 3P-PST-F-drink:PERF milk
 ‘Children drank milk?’

- b. Amatá y-á-nyôye abâna. [Kirundi: OVS]
 milk 3S-PST-F-drink:PERF children
 [Lit.: ‘Milk drank children.’]
 ‘Children (not parents) drank milk.’ (Ndayiragije 1999: 400)

- (62) a. Umunyeshule weese_i a-ø-ra-kunda umwarimu wiwe_i. [Kirundi]
 1student 1every 1SA-PRES-like 1teacher 1of-him
 ‘Every student_i likes his_i teacher.’

- b. *Umwarimu wiwe_i a-ø-ra-kunda umunyeshule weese_i.
 1teacher 1of-him 1SA-PRES-like 1student 1every
 ‘Every student_i likes his_i teacher./His_i teacher likes every student_i.’
 (bound variable reading is out under both SVO and OVS readings)¹⁸

OVS constructions like these have been documented in Lingala and Likila (Givon 1975, 1979), Dzamba and Swahili (Bokamba 1979), Kinyarwanda (Kimenyi 1980, 1988), Kilega (Kinyalolo 1991), and Kirundi (Ndayiragije 1999).¹⁹

In the theoretical syntactic literature, apparent movement of one DP across another has often been explained by some version of equidistance, that is, by considering two DPs within some minimal domain to be of equivalent closeness to the target of movement in a technical (if not an

¹⁸ Carstens 2011 cites Ndayiragije p.c. for judgments that the bound reading is impossible under the SVO interpretation of the sentence as well as to OVS, and that, in contrast to both these cases, a pronoun within a fronted Kirundi operator can be bound by an argument, just like in the English *His chemistry book, every student should read*, contra Henderson (2006b).

¹⁹ It has been our experience that inversion constructions like these are somewhat variably accepted by language consultants, even within a language that purportedly has them. This may be due to intra-language variation, or perhaps due to the precise discourse-conditions that license it being hard to construct in elicitation contexts. It is our impression that the generality of these kinds of inversions within the Bantu language family is yet to be determined (there may be variability in languages it is reported for, and it may exist in languages that it hasn’t yet been reported for).

absolute) sense; e.g. Chomsky 1995, Collins 1997, den Dikken 2006. While this provides a helpful mechanics, equidistance approaches to Bantu locative inversion and SOR must nonetheless grapple with the issue of whether and how the thematic subject is Case-licensed in its low position when T agrees with something else.

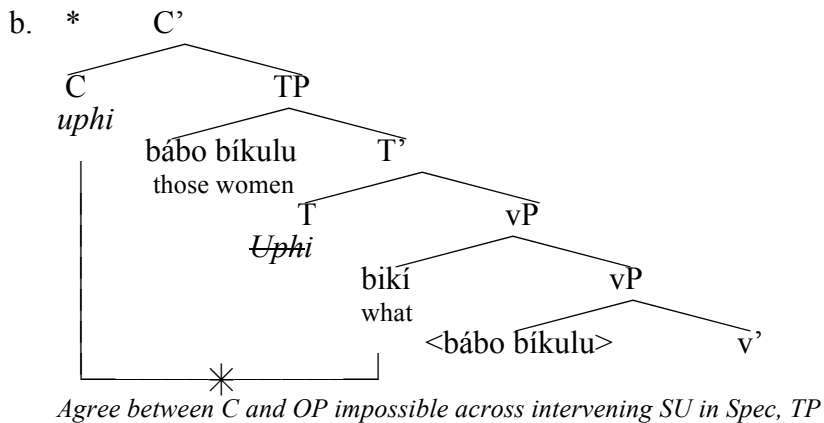
Ura (1996) builds an equidistance account of SOR in which objects first raise to the edge of vP. Since that is where the subject merges, subject and object are (at that stage of the derivation) in the same minimal domain with respect to T. Ura proposes that what allows objects to raise to TP in the relevant Bantu languages is that nominative features are *weak* and (in the early Minimalist ideas of the time) weak features could be checked by covert movement at LF. Ndayiragije (1999) identifies some problems for applying Ura's account to Kirundi, arguing instead that OVS is generated by A'-movement of the subject to a low focus position (with a right-facing specifier). With the subject checking focus features, the object is available to raise to Spec,TP. Crucially, Ndayiragije argues that while functional heads must have their formal features checked and deleted, lexical material including DPs do not have formal features that require checking in a derivation. Therefore, there is no Case requirement on the subject (in the focus projection) that requires checking, only the nominative Case requirement of T, which can be freely satisfied by the object (see the discussion of DP-licensing above in §3).

Carstens (2005) and Henderson (2006, 2011) explore the workings of inversion in languages that exhibit *both* SOR constructions and [wh-V-S] A'-constructions, wherein a fronted operator controls subject-verb agreement. This is illustrated in the Dzamba examples from Henderson (2011) below (see also Bokamba 1979; Henderson cites Bokamba, pc for (63)).

- (63) a. Omwana a-tom-aki imukanda SVO [Dzamba]
 1child 1SA-send-PERF 5letter
 'The child sent a letter.'
- b. Imukanda mu-tom-aki omwana. TOP V S
 5letter 5CA-send-PERF 1child
 'the letter, *the child* sent it.'
- c. imukanda mú-tom-aki omwana REL V S
 5letter 5CA-send-PERF 1child
 'the letter that *the child* sent'

Focusing on Kilega, Carstens (2005) analyzes patterns like (63)c based three assumptions: (i) equidistance in the edge of vP, as proposed in Ura 1996; (ii) uPhi have EPP features in Bantu, and (iii) the grammatical gender of a DP is the "active" feature in relation to any agreeing probe in Kilega, including both T and C (see discussion in §2 above). A subject raised to Spec, TP would be closer to C than an operator in Spec, vP, and non-operators cannot licitly raise to Spec, CP. T must instead raise the operator from Spec, vP to Spec, TP, leaving the subject low.

- (64) a. *bikí bábo bíkulu bi-b-á-kás-íl-é mwámí mu-mwílo?
 8what that 2woman 8CA-2SA-ASP-give-PERF-FV 1chief 18-3village
 'What did those women give the chief in the village?'



A proposed dissociation of agreement and Case serves to allow both inversion of and agreement with the object, and covert Case-licensing of postverbal subjects. This account doesn't fully explain why similar inversion patterns don't arise in all Bantu languages that otherwise seem to disassociate agreement and Case (though see Carstens 2005:242-3 for an approach to this issue in Kinande).

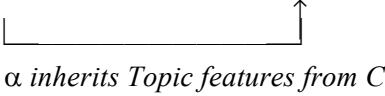
Kinyalolo (1991) accounts for obligatory VS order in Kilega questions with the proposal that Kilega I has no specifier. Preverbal subjects occupy an IP-adjoined position, which intervenes to block wh-movement of objects and adjuncts. Similarly, Henderson (2006) explains inversion in Dzamba operator constructions by claiming that TP has no specifier in Dzamba (and similar languages). All movement to a preverbal position is A'-movement to Spec, CP. This assumption aligns with long-standing observations that we have previously mentioned, that subjects in many Bantu languages have topic properties. This analysis of subjects explains inversion, then, as competition between an operator and a subject for the one available preverbal position.

(65) a. [_{CP} Subject C [_{TP} T [_{vP} <SU> v...]]] or b. [_{CP} Op C [_{TP} T [_{vP} SU v...]]] (Henderson 2006)

The approach makes several strong predictions, among them that any language with OVS topicalization must also have OVS in object relative clauses, and such languages should *only* allow OVS object relative clauses. Henderson (2011) observes that these predictions are not upheld: for example, Kirundi allows OVS but does not require it in object relative clauses. Henderson instead proposes (like Carstens 2005) that C and T both bear phi features, and advocates novel approaches to Agree and locality conditions to explain why subject marking agrees with the topic or relative operator, in the relevant languages; we refer the reader to Henderson 2011 for details. The licensing of post-verbal subjects is taken to be a separate issue and is not addressed.

Miyagawa (2010) argues extensively that Kinande locative inversion is raising to α P, a structural position between TP and CP motivated as the target of A-scrambling in Japanese and Finnish (among other languages). For Miyagawa, α P inherits discourse features like Topic and Focus from C via the Feature Inheritance process of Chomsky (2007, 2008), and these features drive scrambling operations in languages/constructions which have α P. For Miyagawa, the hypothesis of α P in Kinande explains why topical phrases appear to A-move to subject position, which is in reality higher than Spec,TP and endowed with Topic features rather than nominative Case.

Kinande inversions are in fact only instances of (relatively-familiar) information-structure-based scrambling, with the wrinkle that apparent properties of ‘subjects’ such as subject agreement are in reality properties of sentence topics.²⁰

- (66) $[_{CP} C [_{\alpha P} \text{PREVERBAL TOPIC } \alpha [_{TP} T [_{vP} v\dots]]]]$ [Miyagawa 2010]

α inherits Topic features from C

All of these approaches attempt to derive Bantu inversions from general principles of grammar, with varying modifications. Some researchers have given construction-specific kinds of explanations for their particular inversion puzzles: Carstens and Diercks (2013b) argue that inversion of locatives in Lubukusu locative inversion are facilitated by a locative agreement morpheme that heads a AgrP designated for locatives (AgrL); under Relativized Minimality (Rizzi 1990), it probes specifically for locative phi-features and raises locatives across non-locative material to its Spec. Zeller (2012, 2013) analyzes instrument inversion and locative inversion as, in fact, *not* instances of structural inversion. Instead, the apparently-inverted phrase externally merges to the specifier of a predication projection, whose head takes vP as a complement. In this way the structural puzzle presented by these inversion constructions is only apparent, as no syntactic inversion ever takes place.

- (67)  Zeller (2013)

It is clear that inversion constructions are interconnected with the issues addressed in our previous sections: not only structural locality, but also concerns of Case and agreement. Much work remains both to explore inversion patterns in additional languages, to tease out movement from non-movement hypotheses, and to otherwise test and confirm or reject the range of proposals.

4.2 Inversion in the verbal domain: double object (a)symmetries

Since at least Bresnan and Moshi (1990, henceforth B&M) it has been clear that in certain Bantu languages, the two objects of a double object construction (DOC) are equally accessible for a range of syntactic processes. Given consistent cross-linguistic evidence that the second object, O2 of a DOC [V-O1-O2], is lower in the structure than O1 (Barss & Lasnik 1986, Marantz

²⁰ Miyagawa discusses some Kinande constructions reported in Schneider-Zioga 2007 where he claims αP is (exceptionally) not projected, including non-subject relative clauses and clefts. In these instances, phi-features are inherited by T because αP is absent, and T's phi are tied to nominative. So, for example, inside a Kinande locative cleft construction, subject agreement is obligatorily with the grammatical subject, and OVS is ruled out.

1993), symmetrical options in Bantu DOCs have been analyzed in terms of inversion -- mirroring, to some extent, the inversions at the sentential level that we explored above.

Bresnan & Moshi (1990) show that in Kichaga, either object of a DOC may be object marked or passivized (see (68) for passive examples, and 4.3 on object marking).²¹

- (68) a. `M-kà n-a" - i"-lyì-í-ò k-èlya.
 1-wife FOC-1s-PR-eat-AP-PAS 7-food
 'The wife is being benefited/adversely affected by someone eating the food.'
- b. K-èlyá k-í-lyì-í-ò k-i-lyì-í-ò `m-kà.
 7-food 7s-PR-eat-AP-PAS 1-wife
 'The food is being eaten for/on the wife.'

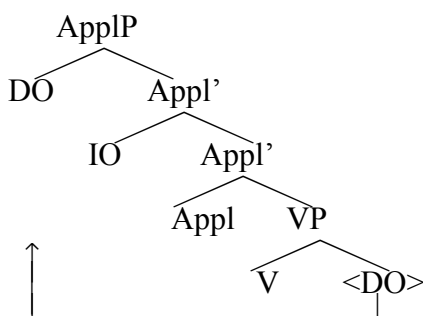
Bresnan and Moshi argue that there are two opposing types of Bantu languages with respect to object properties: symmetrical languages like Kichaga, where both objects of a DOC exhibit core object properties, and asymmetrical languages like Chichewa, where only the "primary" object may do so. In the years since their paper, it's been found that symmetry extends to post-verbal word order in some languages; thus in Lubukusu, either [V-IO-DO] or [V-DO-IO] order is acceptable. Chichewa, an asymmetrical language, does not permit this: compare (69) and (70) (Jerro 2016:174ff).

- (69) a. Omw-ami ku-Ø-ubak-iy-e **omw-ana** en-ju V **REC THEME** [Lubukusu]
 1-chief 1S-PST-build-APPL-FV 1-child 9.house
 'the chief built the house for the child.'
- b. Omw-ami ku-Ø-ubak-iy-e en-ju **omw-ana** V THEME REC
 1-chief 1S-PST-build-APPL-FV 9.house 1-child
 'the chief built the house for the child.'
- (70) a. A-mfumu a-na-mang-ir-a **mw-ana nyumba** V **REC THEME** [Chichewa]
 2-chief 2S-PST-build-APPL-IMP 1-child 9.house
 'The chief built the house for the child.'
- b. *A-mfumu a-na-mang-ir-a nyumba **mw-ana** *V THEME REC
 2-chief 2S-PST-build-APPL-IMP 9.house 1-child
 'The chief built the house for the child.'

In an influential account of the symmetry/asymmetry divide, McGinnis 2001 follows Marantz 1993 in arguing that applied and causative morphemes head projections ApplP and CausP. For McGinnis, Appl and Caus in symmetrical languages have phasal edge features, raising the direct object into locality for passivization and object marking. In a language like Lubukusu, the direct object may surface in outer Spec, Appl or Caus (though something rules out the word order V-DO-IO in some otherwise symmetrical languages, including Zulu).

²¹ Unspecified object deletion is another of B&M's diagnostics for symmetry, which we ignore for space reasons. Bresnan and Moshi in fact claim that a symmetrical language is one in which both objects can simultaneously bear object properties (e.g. a speaker may passivize one object while object marking the other), leaving room for a continuum with intermediate cases.

(71) *Raising DO in a “symmetrical” language – Appl is a phase-head head with an edge feature (cf. McGinnis 2001).*



As in the case of inversion to subject position, there is some evidence that DO-over-IO inversion patterns as A-movement rather than A'-movement. Carstens (2016) shows that in Lubukusu, bound variable relations in DOCs correlate with word order, hence the first object in linear order c-commands the second (see (72) and (73) and the schematic representations in (74) from Carstens (2016:33), and Marantz 1993 for the first application of this important diagnostic to Bantu double object constructions).

(72) a. *Khu-rer-er-e* *o-mu-soleli* *bi-tabu* [Lubukusu]
 1plSA-bring-APPL-PAST 1-1-boy 8book
 ‘We brought the boy books’

b. *Khu-rere-re* *buli* *mu-soleli* *si-tabu* *si-e-we*
 1plSA -bring-APPL-PAST every 1-boy 7-book 7-POSS-1
 ‘We brought every boy his (own) book’

c. **Khu-rere-re* *o-mwen-ene-syo* *buli* *si-tabu*
 1plSA -bring-APPL-PAST 1-1-owner-7 every 7-book
 *‘We brought its owner every book’

(73) a. *Khu-rer-er-e* *bi-tabu* *o-mu-soleli*.
 1plSA -bring-APPL-PAST 8-book 1-1-boy
 ‘We brought the boy books’ [Lit: We brought books the boy]

b. *Khu-rere-re* *buli* *si-tabu* *o-mw-ene-syo*
 1plSA -bring-APPL-PAST every 7book 1-1-owner-7
 ‘We brought every book (to) its owner’

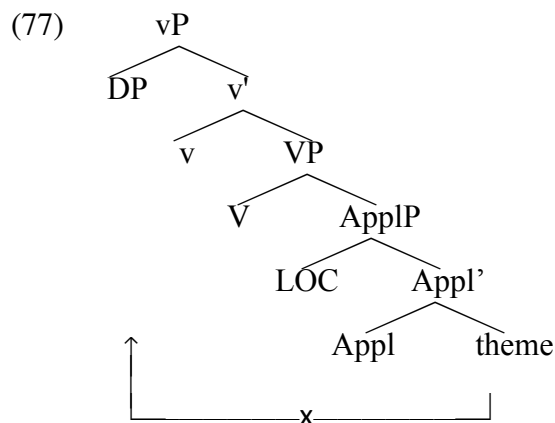
c. **Khu-rere-re* *si-tabu* *si-e-we* *buli* *mu-soleli*
 1plSA -bring-APPL-PAST 7book 7-POSS-1 every 1-boy
 ‘We brought every book (to) its owner’

(74) a. ...<sub>[_{VP} SU v+Appl+bring [_{ApplP} every boy [_{Appl'} <Appl> [_{VP} V his book]]]] = (72)b
 b. ..._{[_{VP} SU v+Appl+bring [_{ApplP} every book [_{ApplP} its owner [_{Appl'} <Appl> [_{VP} ...]]]] = (73)b}</sub>

The picture is vastly more complex than this, however. In a single language, some DOCs turn out to be symmetrical, and others not. Kimenyi (1980) shows that benefactive applicatives are symmetrical in Kinyarwanda, but locative applicatives are not (see (75) and (76)).

- (75) a. Umukoôbwa_i a-ra-andik-ir-w-a *t_i* íbárúwa n'ûmuhuûngu [AK 6:3c]
 girl SP-PRES-write-APPL-PASS-ASP letter by.boy
 'The girl is having the letter written for her by the boy.'
- b. Íbárúwa_i i- ra-andik-ir-w-a umukoôbwa *t_i* n'ûmuhuûngu
 letter SP-PRES-write-APPL-PASS-ASP girl by.boy
- (76) a. Ishuûri_i ry-oohere-j-w-é-ho *t_i* igitabo n'úúmwaalímu.
 school SP-send-ASP-PASS-ASP-LOC book by.teacher
 'The school was sent the book by the teacher.'
- b. *Igitabo_i cy-oohere-j-w-é-ho ishuûri *t_i* n'úúmwaalímu.
 book SP-send-ASP-PASS-ASP-LOC school by.teacher
 [Intended: The book was sent to the school by the teacher.]

McGinnis (2003) maintains that Kinyarwanda's benefactive applicatives are high in the vP structure and are phase heads as in (71). In contrast, locative applicatives are VP-internal. Building on Pytkannen (2001), McGinnis proposes that their “low” applicative head takes the object DP as its complement (see (77)). A low Appl is not a phase head. Because the locative DP in Spec, Appl is highest, if an edge feature of v raises any DP to its edge, it must be the locative. The direct object is therefore systematically trapped.²²



Baker et al (2012) argue for some finer grained distinctions. They show that a causee but not a beneficiary/maleficiary may antecede a direct object reflexive in Lubukusu (see (78)a versus (78)b), and argue on this basis that despite the ability of direct objects to raise across applied

²² In subtler but nonetheless significant differences, Jerro (to appear) shows that Lubukusu morphologically causative ingestive verbs are symmetrical, while other morphological causatives are asymmetrical. He explains this distinction in a lexical-semantic analysis based on the assumption that ingestive causatives are inherently causative (a distinction from the other verbs that behave asymmetrically in a causative construction).

objects, this happens phase-internally where applicatives are concerned (they argue that the *linker* is involved, on which see below). Only causative morphology introduces a new agent (which can bind a reflexive) and hence only causatives introduce a distinct new phase.²³

- (78) a. N-e-siing-isy-a Wekesa mu-luuchi. [Lubukusu]
 SM.c1.1st-TNS-RFM-wash-CAUS-fv Wekesa LOC-river
 ‘I made Wekesa wash himself in the river.’
- b. Wekesa a-kh-ey-ir-ir-e Wafula.
 Wekesa SM.c1-FUT-RFM-kill-APPL-SBJV Wafula
 Not: ‘Wekesa will kill Wafula for himself.’ (a case of euthanasia)
 OK: ‘Wekesa killed himself for Wafula’ (suicide) or ‘Wekesa will kill Wafula for self’

Another factor in word order and A-relations within the vP-domain of Bantu languages is the so-called *linker* -- a morpheme that separates any two post-verbal expressions. In Kinande, either expression can freely precede the linker and control agreement on it.

- (79) a. Mo-n-a-hir-ire okugulu k’- omo-kihuna [Kinande]
 Aff-1sS-T-put-Ext leg.15 Lk.15 Loc.18-hole.7
 ‘I put the leg in the hole.’
- b. Mo-n-a-hir-ire omo-kihuna m’- okugulu
 Aff-1sS-T-put-Ext Loc.18-hole.7 Lk.18 leg.15
 ‘I put the leg in the hole.’ (Baker and Collins 2006: 311)

Baker and Collins propose that the head of a vP-internal Linker Phrase (LkP) attracts a DP to its specifier. They explore a variety of languages with linkers, some of which are symmetrical like Kinande, and others of which are asymmetrical, such as #Hoan. Like applied and causative constructions, the facts of linker constructions vary strikingly across languages, and have stimulated considerable debate and numerous theoretical proposals, among them that linker syntax in languages like Kinande is not sensitive to hierarchical relations and freely violates the Minimal Link Condition (see Baker and Collins 2006) or are copulas, triggering predicate inversion (Schneider-Zioga 2015a,b; see also Richards 2010 for another account).²⁴

Summing up, there are argument inversions in the vP-domain like there are in the clausal domain, impacted by a variety of factors. Their striking complexities continue to give rise to investigation and debate.

4.3 A note on object marking

The foregoing discussion ignored object marking, a property of many Bantu languages that serves as a key diagnostic for (a-)symmetry and hence inversions within vP. Object marking is

²³ Baker et al (2012) show that Lubukusu has largely symmetrical word order of causatives, but asymmetry emerges when one of the causative objects is a first or second person pronoun: in that instance, only the causee may take primary object properties (not the theme).

²⁴ In this way, the “symmetrical” structures of Bantu double object constructions are a result of “symmetry breaking” at an analytical level, a collision of terminology from two different scholarly traditions.

an area of rich cross-Bantu variation, and hence a fertile research area. Before closing we provide a brief sketch of it and of its relevance to this topic.

Most (narrow) Bantu languages allow discourse-familiar objects to be represented via a pre-stem *object marker* (OM) on the verb, as in the Chichewa (80).

- (80) Njũchi zi-ná-wá-lum-a alenje. [Chichewa]
bees SM-PST-OM-bite-INDIC hunters
'The bees bit them, the hunters.' (Bresnan and Mchombo 1987:744)

Bantu OMs have much in common with Indo-European clitics (on which see Kramer 2014, Anagnostopoulou 2017 for overviews of a highly active research program), though they differ in having entirely rigid placement just before the verb stem. As with clitics, there is cross-linguistic variation on the licitness of "doubling," the number of OMs tolerated, interactions among multiple markers, and their impact on meanings (on these points see Bresnan and Mchombo 1987; Riedel 2009; Marlo 2014, 2015; Zeller 2014; Sikuku et al to appear, and many others).

Languages that permit a single OM may be asymmetrical, like Swahili (van der Wal 2017):

- (81) a. A-li-m-pa kitabu
ISM-PST-1OM-give 7.book
'He gave him the book.'

b. *A-li-ki-pa Juma
ISM-PST-7OM-give 1Juma
[Intended: He gave it to Juma.]

On the other hand, they may be symmetrical, like Zulu (Adams 2010:11)

- (82) a. U-mama u-ba-nik-e in-cwadi (aba-ntwana)
1a-mother 1SM-2OM-give-PST 9-book 2-children
'Mother gave them the book (the children)'

b. U-mama u-yi-nike-e aba-ntwana (incwadi)
1a-mother 1SM-9OM-give-PST 2-children 9-book
'Mother gave it to the children (a book)'

This difference correlates with other diagnostics for symmetry, such as passivization (see (75)).

Based in part on variation with respect to the licitness of doubling, analyses of Bantu object marking range from purely agreement-theoretic to incorporated pronoun approaches (see Riedel 2009 for an agreement approach, Bresnan & Mchombo 1987 on OMs in Chichewa as incorporated pronouns, Henderson 2006, Zeller 2014 for arguments that some OMs are agreement and others clitic pronouns, and van der Wal 2015b for something of a hybrid approach in terms of Roberts' 2010 theory of clitics).

Among relatively recent findings are certain information-structural consequences of object marking. Bax and Diercks (2012) show that Manyika Shona OMs may double an in situ object

just in case the object is interpreted as topicalized (non-focus); see also Zeller 2008 who cites Kallulli 2000 on Albanian and Greek clitic doubling). Work on Zulu and Luganda has revealed that object marking is related to right-dislocation of objects (Zeller 2012, 2014; 2015; Ranero to appear). Sikuku et al (to appear) demonstrate that OMs may double an *in situ* object in Lubukusu, but only if the sentence received a verum (focus) reading:

- (83) n-aa-βu-l-íí* lé βúu-suma²⁵
 1sgS-PST-14O-eat-PFV 14.14-ugali²⁶
 ‘I DID eat the ugali!’

A sentence like (83) is licit in the same contexts as its English translation – where the proposition is already in the common ground and the speaker is emphasizing the truth of the claim, to settle the issue.

In languages which allow multiple OMs on a single verb, interactions and effects of a/symmetry are a rich domain of research, beyond what we can do justice to here. See van der Wal (2018), Marlo (2014, 2015), and Marten and Kula (2012) for recent typological overviews.

5 Information Structure in Bantu syntax

5.1 Introduction

As noted in section 3.6, information structure (IS) impacts the morphosyntax of Bantu languages in some striking ways. In a demonstration of the kinds of variable foci that overview chapters can have, van der Wal’s (2015a) chapter “Bantu Syntax” concentrates primarily on this class of phenomena; in contrast, our coverage here is modest. In this section, we provide only a sketch of some IS topics that have attracted researchers’ attention, some references for those seeking further information, and a few remarks.

5.2 Preverbal focus marker

In a variety of northeastern Bantu languages, verbs generally bear a morpheme that interacts with focused material in interesting ways (see Abels and Muriungi 2008 for Tharaka, Schwarz 2007 for Kikuyu, Landman and Ranero to appear for Igikuria). In the Kuria (84)a, the focus marker appears prefixed to the verb and the interpretation is VP-focus. In (84)b, the focused subject must instead bear the focus marker.

- (84) a. aba-saacha m-ba-re-mah-a eng’-ombe [Kuria]
 2-man FOC-2SA-FUT-see-FV 9-cow (Ranero 2014)
 ‘The men will SEE THE COW.’
- b. *(n-)aba-saacha ba-a-mah-er-e eng’-ombe
 FOC-2-man 3plSA-PST-see-PRF-FV 9-cow
 ‘THE MEN saw the cow.’

²⁵ The downward facing arrow is a part of the tonal transcription, marking downstep.

²⁶ *Ugali* is the Swahili (and Kenyan English) word for the staple stiff cornmeal porridge dish of East Africa.

5.3 Conjoint/disjoint and focus

A large number of central and southern Bantu languages have what is known as the conjoint/disjoint contrast in verbal paradigms. In some languages, conjoint forms are always non-final in VP, whereas disjoint forms are final (for example, Zulu: Van der Spuy 1993, Buell 2006). But in others, the choice of forms correlates with contrasting patterns of foci. As van der Wal (this volume) notes, Kimatuumbi (as described in Odden 1996) indicates post-verbal focus with the conjoint and verb focus with the disjoint (van der Wal cites Odden 1996: (60) and (61) for (85); glosses are van der Wal's).

- (85) a. CJ Ni-kata kaámba.
1SG.SM-cut rope
'I am cutting ROPE (not something else).'
- b. DJ Eendá-kaatá kaámba.
1SG.SM.PROG.DJ-cut rope
'He is cutting rope (not doing something else to it).'

Van der Wal and Hyman (2016) provides both an overview and detailed work on this phenomenon in various languages.

5.4 Immediately after verb focus

We have already noted some ways in which focus and word order interact including the common prohibition on focused material in certain positions. Another recurring phenomenon is a strict focus domain following the verb, often referred to as an Immediately-After-the-Verb effect (IAV). We illustrate with data from Cheng & Downing's (2012) study of IAV in Zulu ((86) and (87) from Cheng & Downing (2012:248). Parentheses indicate phonological phrasing; obligatory object marking indicates that material following the focus is right-dislocated).

(86) *Neutral word order S-V-O-XP*

- (Si-thwéle a-má-tha:nga ngó-bhasikí:di). [Zulu: Cheng & Downing 2011]
1plSA-6OM-carry 6-6-pumpkin with-1a-basket
'We are carrying the pumpkins in a basket.'

(87) *Focused or questioned non-subjects are immediately post-verbal; all else is vP-external (internal arguments obligatorily doubled by object markers on the verb)*

- Q: (u-wa-thwéle ngá:n') a-má-tha:nga)? [Zulu: Cheng & Downing 2011]
2sSA-6OM-carry how 6-6-pumpkin
'How are you carrying the pumpkins?'
- A: (Si-wa-thwéle ngó-bhasikí:d') a-má-tha:nga).
1plSA-6OM-carry with-1a-basket 6-6-pumpkin
'We are carrying the pumpkins in a basket.'

5.5 Approaching the distribution of focus and topic

The selective distribution of focused and topical material has been approached by a number of researchers. By this point, it seems fair to generalize that most assume the existence of dedicated structural position for phrases bearing specific interpretations -- a ‘cartographic’ approach. While time and space preclude detailed discussion of approaches to each of the interesting phenomena we have mentioned, we provide a bit of an overview on the two broadest issues -- restrictions on preverbal subject position, and middle-field focus in Bantu languages.

5.5.1 Restrictions on the preverbal subject position

As noted in section 4.1, there have been a number of proposals that the preverbal subject in various Bantu languages is an A' position, motivated initially to address its competition with operator fronting (though see section 4.1 and references therein for conflicting evidence). Kinyalolo (1991) proposes an IP-adjoined position for preverbal subjects. Baker (2003) proposes that Kinande subjects are systematically left-dislocated. Schneider-Zioga (2007) situates the Kinande subject in Spec, TopP to explain anti-agreement effects, and Henderson (2006) proposes that subjects are in Spec,CP for a variety of Bantu languages that have inversion properties like Dzamba. Miyagawa (2010) proposes a discourse-oriented position α P between CP and TP to be the canonical position of subjects (and, often, subject-marking), as we noted in section 4.1.

Pietraszko (2017) presents a recent version of this proposal featuring greater detail and some novel independent motivation, based not only upon the anti-focus/topical restriction on preverbal subjects, but also some morpho-syntactic differences between indicative clauses on the one hand and subjunctives and relative clauses on the other. Pietraszko demonstrates that in Ndebele, though preverbal subject position of regular indicative clauses cannot host focused material, for some speakers focused material is acceptable in preverbal subject position of subjunctives and relative clauses.

- (88) Si-funa (ukuba) u-Thandeka *kuphela* a-cul-e [Ndebele]
 1Pl. SM-want-FV that AUG-1a.Thandeka only 1.SM-sing-SJ (some speakers)
 'We want only Thandeka to sing.'

There are correlates to this difference: subjunctives and relatives have different subject markers and they express negation with a morpheme that follows subject marking whereas negation in indicatives precedes subject marking.

- (89) a. a-**ngi**-phek-i b. **ngi-nga**-phek-i [Ndebele]
 NEG-1s.SM- cook-FV 1s.SM- NEG-cook-FV
 'I don't cook.' '...that I not cook.'
- (90) a. u-Thandeka **u-ya**-phek-a b. ukuba u-Thandeka **a**-phek-e
 AUG-1a.Sipho 1.SM-DJ-cook-FV that AUG-1a.Thandeka 1.SM-cook-SJ
 'Thandeka cooked' '...that Thandeka cook'

Pietraszko (2017) accordingly proposes that indicatives include layers of structure lacking in subjunctives and relatives including a TopP layer where subjects of indicatives surface, and a Σ P,

where indicative negation resides. Lacking this layer, subjunctives and relatives have subjects in TP, and negation in NegP.

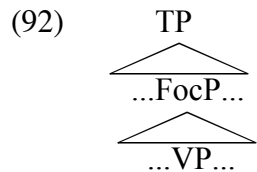
- (91) a. Indicative: $[_{CP} [_{\Sigma P} a- [_{TopP} SU Top_{\phi} [_{TP} T [_{NegP} \emptyset [_{vP} \dots]]]]]]]$
 b. Subjunctive/Relative: $[_{CP} [_{TP} SU T_{\phi} [_{NegP} nga- [_{vP} \dots]]]]]$

Their reduced architecture entails that relative clause subjects do not appear in TopP, blocking A'-movement; they therefore do not (have to) surface post-verbally in A'-constructions, as they do in languages like Kilega. Assuming that the option of subjects surfacing in Spec, TP is unavailable in A' constructions of languages like Kilega, it follows that subjects will have to remain vP-internal. It remains for future research to test Pietrazko's approach against a broader range of Bantu languages.

5.5.2 Post-verbal focus

The topography of focus in Bantu languages has occasioned a large variety of proposals. To capture the focus reading of post-verbal subjects in Kirundi, Ndayiragije (1999) proposes a middle field FocusP, between TP and vP.²⁷ Sabel & Zeller (2006) and van der Wal (2006) advocate a similar architecture of a low focus position to account for focus phenomena in various Bantu languages. Carstens & Mletshe 2015, 2016 adopt this hypothesis for Xhosa, to account for both focus on post-verbal subjects of [VS..] constructions and Immediately After Verb (IAV) focus on other constituents -- X in [SVX] constructions.

- (61) b. Amatá y-á-nyôye abâna. [Kirundi: OVS]
 milk 3S-PST-F-drink:PERF children
 [Lit.: 'Milk drank children.']
 'Children (not parents) drank milk.'



In an important departure from this pattern, Cheng and Downing (2012) argue that postverbal focus in the Zulu IAV domain is not due to a dedicated focus position. Instead, the focused material is vP internal. Obligatory object marking indicates that everything else has moved out of vP, leaving a single occupant, which is associated with a focus reading (focus boldfaced; (93)b adapted from Cheng & Downing: (21)).

- (93) a. u-Sipho u-yi-phek-el-a **baani** in-ku:khu? [Zulu]
 1-Sipho 1SA-9OM-cook-APPL-FV who 9-chicken (Cheng & Downing 2011)
 'Who is Sipho cooking the chicken for?'

- b. $[_{IP} Sipho u- [_{XP} cook+X [_{vP} Sipho V+v [_{VP} who V chicken]]]] chicken]$

²⁷ Since Kirundi word order in e.g. locative inversion constructions is Loc-V-O-S, Spec, Foc is on the right, in Ndayiragije's analysis of Kirundi.

Under the alternative approach that assumes focused materials occupies a dedicated FocusP, clitic-dislocation of all non-focused material is mysterious, as they point out.

5.6 Summary

It seems clear that features related to discourse structure play an unusually strong role in determining word order in Bantu grammar. In addition to the striking distribution of focused material, researchers have also noted often the restriction of material in preverbal subject position to topical and old information, in many Bantu languages. Based on strong and consistent mappings of this kind, many researchers of Bantu languages have come to view the phenomena we have briefly described here as revealing deep connections between information structure and syntax (see van der Wal 2015a, 2017 for discussion).²⁸

6 A'-properties in Bantu languages

A' constructions in Bantu languages exhibit a great deal of variation, both cross-linguistically and internally to a given language. To begin with, there are in situ, ex situ, and partial movement wh-constructions in many Bantu languages (though ex situ questions are often clefts, as in the Zulu (94)b,c; these examples from Sabel & Zeller 2006).

- (94) a. [CP U-cabanga [CP ukuthi uBev u-thenge **ini**]]? [Zulu]
 2s-think that 1aBev SP1a-bought 9what
 'What do you think Bev bought?'
 b. Y-ini o-cabanga [CP ukuthi uBev u-yi-thengile ___]]?
 COP-9what RC2s- think that 1aBev SP1a-9OM-bought
 'What do you think Bev bought?'
 c. [CP U-cabanga [CP ukuthi yi-ni a-yi-thengile-yo uBev ___]]?
 2s-think that COP-9what SP1a-9OM-bought-RS
 'What do you think Bev bought?'

For detailed descriptions and analyses of A'-constructions in various Bantu languages see (among others) Zentz (2016), Bokamba (1976); Wasike (2007); Zerbian (2006b); Muriungi (2005, 2011); Muriungi et al (2014); Letsholo (2006, 2007); Downing (2011), Sabel and Zeller (2006).

We have already touched on some common distributional properties of A' constructions that are much discussed in the Bantu syntax literature: the frequent ban on preverbal subject questions, the phenomenon of immediately after verb (IAV) question word placement, and the common phenomenon of VS order in A' constructions.

One other aspect of A' constructions with a direct link to previous content in our chapter is the phenomenon known since Ouhalla's (1993) work on Berber as *anti-agreement*, though the term has been shown to be a misnomer for Bantu. As the examples in (95) and (96) show, subject extraction levels person distinctions, leaving only noun class agreement, that is, number and

²⁸ Work in other frameworks has emphasized the mapping of information structure and syntactic structure, for example Bresnan and Kanerva (1989) and Bresnan (1994) on locative inversion in the LFG framework.

gender (cf. Bokamba 1976, Kinyalolo 1991, Schneider-Zioga 2007, Henderson 2013, Diercks 2010, Zentz 2015 on this phenomenon in various Bantu languages).

- (95) a. t-á-li kikóngóló ang'ine [_{RC} **ú**-á-kít-ile bubo] [Kilega]
 neg-3rdSing-be 7stupid as.me 1whA-ASP-do- ASP 14that
 's/he is not as stupid as me who have done that'
- b. *t-á-li kikóngóló ang'ine [RC n-á-kít-ile bubo]
 neg-3rdSing-be 7stupid as.me 1st.SING-ASP-do- ASP 14that
 's/he is not as stupid as me who has done that'
- (96) a. t-á-li kikóngóló anga biswé [_{RC} **b**-á-kít-ile bubo]
 neg-3rdSing-be 7stupid as us 2CA-ASP-do- ASP 14that
 's/he is not as stupid as we who have done that'
- b. *t-á-li kikóngóló anga biswé [RC tu-á-kít-ile bubo]
 neg-3rdSing-be 7stupid as us 1st.PL-ASP-do-ASP 14that
 's/he is not as stupid as we who have done that'

Henderson (2013) and Diercks (2010) argue that syntactic strategies to avoid or repair extraction from Spec, TP give rise to this effect (see Rizzi & Shlonsky 2007 for a relationship with that-trace effects in French/English). Schneider-Zioga (2007) attributes it to an anti-locality constraint on extracting already-dislocated subjects.

Much generative research on the syntax of Bantu languages has explored the structure of relative clauses, which show a variety of interesting patterns in the now-typical domains of word order and agreement (Barrett-Keach 1980; Bokamba 1976; Ngonyani 1999, 2001; Riedel 2010; Demuth and Harford 1999b; Henderson 2006; Zeller 2004; Simango 2006; Kawasha 2002, 2008; Cheng 2006; Zentz 2015; for an overview see Cheng this volume). Space prohibits us from an extensive discussion of these issues here, so we refer the reader to the fairly extensive literature.

7 Conclusions

In this chapter we have presented an overview of major theoretical questions that have been addressed by research on Bantu languages. In the process of this discussion we have overviewed a large variety of relevant syntactic constructions, though for a detailed look at the range of particular constructions of interest in Bantu languages, the individual chapters in this volume will be a much better resource.

As is necessarily the case with any overview, what we have presented here is incomplete, having been articulated from a particular perspective. We have focused on the role Bantu languages have played in syntactic theory relating mainly to the A-properties of Bantu languages: agreement, Case, DP-licensing, structural hierarchy and inversion constructions. We briefly commented on additional relevant issues that have generated a vast amount of research but which we did not have space to thoroughly explore, specifically information structure, various A'-properties, and the syntax of object marking.

There are broad, persistent similarities between Bantu languages that have raised and continue to raise theoretical challenges for generative syntacticians, as we have noted throughout. But the tendency of theoreticians (including ourselves) to posit that “Bantu does X” is also risky: the Bantu language family is very large, and has a wide range of morphosyntactic variation between its members. Most Bantu languages are still undocumented or underdocumented, and for syntactic research the situation is even worse—with respect to the kind of careful, detailed syntactic judgments there is much work to be done even in the (few) languages that are relatively well-researched. What has preceded shows that a lot of important work has already been done, it also repeatedly points to the fact that the Bantu language family is brimming with potential for intriguing empirical research and important theoretical contributions for the foreseeable future.

8 Acknowledgements

9 References

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