

Parameterizing Case: Evidence from Bantu

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Abstract:

Bantu languages display a number of constructions which raise serious questions about the universality of the theory of abstract Case as currently realized in the Minimalist Program. Chomsky (2000) claims that positing uninterpretable features (like Case features) is not purely stipulation, but that uninterpretable features are justified by their visible effects in the syntax. This paper presents evidence that the syntactic effects predicted by Case Theory are not borne out in Bantu languages, which in fact display effects that are only predicted to be possible in the *absence* of uninterpretable Case features. Evidence includes constructions where Case-checking should require a DP to cease being active, but it does not do so (e.g. compound tenses and raising constructions), as well as instances where Case-checking could not have occurred, but the constructions are nonetheless acceptable (e.g. *possible*-constructions and locative inversion). It is claimed that uninterpretable Case features are not present in Bantu languages, and that it is instead gender features that make a goal active for Agree (following Carstens (to appear)).

Keywords: Case, Agreement, Bantu, Gender, Activity Condition

1 The Core Issues*

1.1 Introduction

This paper addresses the universality of Case Theory based on evidence from Bantu languages, in essence reviving Perez's [Harford] (1985) claim that the Government & Binding Theory (GB) system of Case is inoperative in Bantu languages.¹ Case Theory is perhaps one of the most fundamental components in the Principles & Parameters framework, central to the architecture of grammar and relevant to the derivation of almost any construction in language. There are a large number of constructions in Bantu languages, however, which are problematic for Case Theory. Researchers have puzzled over some of these problematic Bantu data in the past, and this paper will contribute yet another Bantu construction that does not find an explanation under Case Theory. Furthermore, this paper proposes a solution that strikes to the heart of the matter: given the large amount of data in Bantu languages which are unexplained under Case Theory, I propose that a theory of (abstract) Case in fact does not apply to Bantu languages. Specifically, I claim that Bantu languages do not have uninterpretable Case features in their feature inventories.²

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¹ Perez [Harford] (1985) traces the idea that Case may be parameterized to Chomsky (1981: 50), though his proposal was not so much a parameterization of the entire system of Case, but rather a parameterization of what heads were capable of assigning Case or under what configurations Case might be assigned.

² Although such macro-parametric claims must be tempered by allowing individual language differences: see Baker (1996, 2008).

The implications for such a claim are far-reaching, and it may turn out in the end that the theoretic challenges in parameterizing Case Theory are insurmountable. I will nonetheless continue in this line of argumentation in a good faith effort to address the wealth of evidence from Bantu languages that is inconsistent with Case Theory.

Broadly speaking, claiming that there are no abstract Case features in Bantu languages makes two types of predictions: similar constructions in both Case- and non-Case-languages should show slightly different properties, but there should also be constructions in non-Case-languages which are simply not possible in other languages with abstract Case features. The Bantu data presented in this paper demonstrate that both of these predictions hold true. The main goal of this paper, therefore, is to establish that abstract Case is not present in any demonstrable way in Bantu languages.

1.2 A Case Parameter

As stated above, the thesis explored in this paper is that Bantu languages do not have uninterpretable Case features (μ Case) in their feature inventories. The empirical evidence for this claim is considered in the §2 - §4, but first I will formalize the idea of parameterizing Case in this sub-section, and then in the next sub-section I will address the empirical predictions of this claim. The heart of Case Theory in its Minimalist realization is that all argument noun phrases bear a μ Case feature which must be checked in the course of the derivation, and the configurations in which Case-checking occurs therefore controls NP distribution, a point which is discussed further in §1.3 below. The question addressed in this paper is whether NP distribution is indeed universal in the ways predicted by Case Theory: I claim that it is not.

Chomsky (2001) states that “We adopt the conventional assumption that [a given language] L makes a one-time selection [F_L] from [the set of features] F. These are the features

that enter into L; others can be disregarded in the use of L.” The absence of abstract Case features in a given language or family of languages may well be an example of this sort of variation of feature-selection. The result will be a macro-parameter (in the spirit of Baker 1996, 2008) that can be formulated as in (1), with the claim for Bantu languages stated in (2):

- (1) **Case Parameter:** Uninterpretable Case features are/are not present in a language
- (2) **Case Parameter, Bantu:** Uninterpretable Case features **are not** present

Immediately relevant to this claim is the fact that Bantu languages display no morphological case, that is, noun phrases appear in the same form whether they are a subject, a primary object, a secondary object, or an oblique.³ Historically there has been a relatively direct theoretical connection between abstract Case and morphological case (i.e. the morphological forms appearing on NPs). Whereas abstract Case is taken to be the means of licensing NPs, explaining where NPs may and may not appear, morphological case was assumed to be the morphological realization of that more abstract relationship (see Chomsky 1981, 1986; Fillmore 1968). Over time, however, much research was done that claimed that there is a significant divide between whatever abstract system is responsible for NP-licensing, and the morphological realization of

³ This does not mean that relationships that are represented via case relationships in other languages do not exist in Bantu languages, as pointed out by an anonymous Syntax reviewer. For example, the genitive-type relationship is represented in many Bantu languages with the associative marker *-a* (Swahili: *simu ya Juma* lit: ‘phone of Juma’, or ‘Juma’s phone’). I do not take the associative marker to be a realization of morphological case but rather an element more like a preposition, which is made more plausible by the fact that it agrees with the head noun rather than with the subordinate noun (which it would arguably be serving as the case marker for). Likewise, many Bantu languages have a locative suffix that makes a NP into a locative phrase (Swahili: *shule-ni*: school-LOC: ‘at school’). I do not take this to be a case marker, but instead simply a suffix which makes a non-locative phrase into a locative phrase (joined with the assumption that locative phrases have specific syntactic properties in Bantu languages). This is relevant because phrases representing locations generally do in fact have a separate syntax from other obliques in Bantu languages.

case (cf. Bobaljik 2008; Marantz 1991; McFadden 2004; Sigurðsson 1991, 2003; Zaenen, Maling, and Thráinsson 1985).

Despite this large amount of work, however, there is still a frequent practice in generative circles to use morphological case to diagnose abstract NP licensing, and there are still arguments to say that there is still some direct (albeit not perfect) correlation between abstract Case and morphological case (e.g. Legate 2008). Whether this practice is justified or not, there remains a strong theoretical connection between morphological case realizations and NP licensing. If there does remain some connection between abstract Case and morphological case, even if it is not completely deterministic, the lack of morphological case in Bantu is relevant to the defense of the Bantu setting of the Case Parameter in (2).

Even in the event that morphological Case and abstract Case licensing are completely distinct, if we are to posit a syntactic feature (μ Case) which has no phonological reflex at all, it must be possible to definitively demonstrate its syntactic reflexes. If these cannot be demonstrated for certain languages, the argument for the existence of this abstract feature in these languages is doubtful at best, despite the appeal of a strong theory of Universal Grammar.

In fact, as an anonymous reviewer points out, Case Theory itself can be criticized on purely Minimalist concerns: it is in fact a stipulation that NPs must be generated with unvalued Case features, as this requirement is not derived from any basic component of the grammar. If it can be demonstrated that NPs can be licensed in different ways in different languages (as will be argued for in this paper), claiming there are no Case features in those languages removes an unnecessary stipulation from the theory. Recognizing different strategies for NP-licensing will not only broaden the empirical coverage of our theory, but will begin to sharpen our conception

of what Case features actually are and what they accomplish in the grammar, perhaps providing insight into a deeper explanation of NP licensing more generally.

This is not the first claim to the effect that Case may be parameterized. Chomsky (1981: 50, 172) observes that Case could possibly be parameterized in a variety of ways; specifically, he conjectures that the identity of Case-assigning heads could vary between languages, or that the configuration under which Case is assigned (i.e. the precise definition of government) could vary between languages as well. This, however, can be taken to reflect GB theory of the time which maintained a more direct connection between morphological case and abstract Case. A sharper distinction between abstract Case and morphological Case has resulted in a more uniform application of abstract Case to all languages, codified in Chomsky's (2000, 2001) formulation of Minimalist syntax (see also Bobaljik and Wurmbrand 2006).⁴

Many researchers have puzzled about the Case-related properties of Bantu languages in inversion contexts: Baker (2003) and Ndayiragije (1999) propose distinguishing the properties of lexical heads (e.g. N^o) as opposed to functional heads (e.g. D^o) to account for the lack of Case-checking in Kinande and Kinyarwanda respectively, so that certain noun phrases don't need to have their Case checked (NPs as opposed to DPs). In contrast, Carstens (2005) presumes an additional Case-checking Agree relation in certain contexts to account for Case features left

⁴ The idea that a language may lack abstract Case has been independently argued by Markman (2009) in work that became available after this paper was written. The implications and connections between our analyses are a point for future research, though I will comment briefly here. Among the differences in our proposals, Markman claims that the crucial role of Agree is deletion, and that the presence/absence of Case interacts with deletion. This paper follows recent proposals that uninterpretable features need not be deleted at all, and the relevant operation is instead valuation. This leads to different implementations of the absence of Case, with different empirical predictions. Crucially, Markman predicts that all overt (agreed-with) NPs in non-Case languages are necessarily dislocated, whereas this paper makes no such prediction, a point which can be tested cross-linguistically. Furthermore, as a small note, Markman (2009: 418) cites data from Vitale (1981) to claim that overt subjects of infinitives are disallowed in Bantu, using a (typically) control-based construction in Swahili (**John tried Mary to open the door*). As discussed at length in this paper, there are a multiple contexts in which overt subjects of infinitives are fully acceptable (a point which is certainly amenable to Markman's analysis). The fact that Markman (2009) reaches the same conclusion advocated in this paper based on a more typologically-varied selection of languages does however provide strong independent support for the conclusion that Case features are not universally present.

unchecked by overt agreement relations in Kilega. My claim that abstract Case is not active in Bantu languages is not completely novel in itself: Perez [Harford] (1985) made this claim based on raising constructions in Kiruúndi, Shona, and Kikuyu, and Alsina (2001) makes a similar claim based on certain differences between Chichewa and Catalan ditransitives. This paper addresses the previous work in three ways: first, the parameter setting in (2) is a more precise formulation of the claim that Case is not relevant to Bantu languages, in a modern architecture. Second, I offer new evidence from Swahili, Digo, and Lubukusu, which further supports this claim, striking at some of the foundational empirical examples of Case Theory. Finally, I demonstrate that a number of previously noted (and perhaps peculiar) properties of Bantu languages can be derived from a single parameter-setting, and the subsequent requirement that Agree is gender-based, rather than Case-based. This question is taken up in §2.4 below, with special reference to independently developed work by Vicki Carstens (to appear).

It is important to briefly note what this paper is *not*. I do not provide a complete re-analysis of every Bantu construction which has been given a Case-based analysis in the Minimalist Program or the GB tradition: such a task goes far beyond the scope of a single paper. On a number of key points I do offer proposals that may lay the groundwork of such re-analyses, accounting for the largest and most pressing questions. Examining all of the potential consequences of the proposal in (2), however, is a large task requiring continued research. Rather, as I noted before, I provide a systematic argument that the system of abstract Case is unnecessary and unmotivated for Bantu languages, and analyses of many key constructions are in fact more elegant without such Case features.

1.3 A language without Case

Abstract Case plays a central role in the general architecture of grammar within the Minimalist Program, relevant to the derivation of almost any construction due to its function licensing (argument) NPs, raising the question of what a language without abstract Case would look like, beyond lacking morphological case.⁵ The connection between overt subjects and finite clauses is a central component of Case Theory: finite T licenses NP subjects by checking Case, whereas non-finite T cannot check Case and therefore cannot license overt NP subjects. This accounts for the contrasts in (3): in (3a) the subject of the embedded clause *Michael* can only be licensed with the addition of a Case-checking complementizer, and in (3b) the NP subject of the infinitive clause in subject position is only licensed by the presence of that same complementizer.

- (3) a. It is possible *(for) Michael to call Tegan.
b. *(For) Michael to call Tegan would be a good thing.

If a language did not have abstract Case, however, we would expect the licensing differences to be leveled between finite/non-finite clauses, and §2 shows that this is the case for Bantu. That is to say, we should find non-finite clauses containing overt subjects in cases where those subjects are not licensed by external Case-checking probes. In a similar manner, analyses of raising constructions have intersected strongly with Case Theory, explaining the paradigm in (4):

- (4) a. It seems that John is happy.
b. *It seems John to be happy.

⁵ Assuming a relationship between abstract Case and morphological case: see the discussion in the preceding section.

- c. John seems to be happy.
- d. *John seems that is happy.

In (4c), the subject of the embedded clause can raise to subject position because it has not been Case-checked in the lower clause, and therefore is active as a goal of Agree for the matrix finite T. This lack of Case-checking in the lower clause is precisely the reason for the unacceptability of (4b). Examples like (4d) are then ruled out because the Case requirements of the subject DP have already been satisfied by the lower finite clause. This falls under a theory of Activity, wherein the checking of the uninterpretable Case feature on *John* in the embedded clause in (4a) renders the NP inactive for further agreement operations.

The prospect of a language without Case features raises serious questions about what Activity (if at all) will be displayed by NPs, for example, whether A-movements like those in (4c) will be licit. In fact, such A-movements are licit in Bantu, and surprisingly, even A-movements like the illicit movement in (4d) are acceptable, indicating an entirely different system of activity in Bantu languages (§3).

Finally, within the current Minimalist architecture, Case is checked via an Agree relation. According to Chomsky (2000), the uninterpretable ϕ -features of a probe α seek a goal β with interpretable ϕ -features and an unchecked Case feature within its c-command domain.

$$(5) \quad \text{Agree (Chomsky 2000)} \\ \left[\begin{array}{c} \alpha \left[\begin{array}{ccc} \dots & \beta & \dots \end{array} \right] \\ [u\phi] \quad [\phi, u\text{Case}] \end{array} \right] \rightarrow \left[\begin{array}{c} \alpha \left[\begin{array}{ccc} \dots & \beta & \dots \end{array} \right] \\ [\# \phi] \quad [\phi, \# \text{Case}] \end{array} \right]$$

Agree results when the probe's search is successful, resulting in the deletion (or valuation) of the uninterpretable features of the probe and the Case feature of the goal. In head-marking

languages like Bantu languages where argumental relations are realized via agreement on verbs, we would expect these agreements to correspond to Case-checking relations. If, however, a language lacked Case features, NPs should be able to be licensed without being agreed with, which we also find in Bantu, for example, in locative inversion contexts (§2.2). This paper therefore proceeds by demonstrating that NPs in Bantu occur in non-Case-marked positions (§2) and can move out of Case-marked positions to higher Case-marked positions (§3), explained by the setting of the Case Parameter in (2) along with an alternative theory of Activity, discussed in §2.4. Section 4 then discusses further extensions and implications of the Case Parameter.

2 NPs occur in non-Case-marked positions

Following the proposal in (1), in a language that does not have Case features there ought to be constructions which are prohibited in languages that do have Case features. This section examines three different instances of common constructions among Bantu languages where NPs can occur in positions where their Case features (if they were present) could not have been checked, providing strong positive evidence for the setting of the Case Parameter for Bantu in (2).

2.1 Subjects of infinitives

As noted in the previous section, GB/Minimalist theory holds that overt noun phrases are prohibited as subjects of nonfinite clauses in the absence of an external licenser, because non-finite T is not capable of assigning/checking Case. Following (2), the hypothesis that Bantu languages do not have abstract Case features predicts that we should find overt subjects of non-

finite clauses in Bantu languages, even in cases where they are not licensed by the matrix verb in an exceptional case-marking configuration (see §2.1.2 below).

2.1.1 Implications of Possible-Constructions

There is at least one example of such a construction with overt subjects of infinitives in Bantu languages, which I will refer to as the *possible*-construction. Consider the familiar English data in (6):

- (6) a. It is possible that Mike will call Tegan.
b. It is possible *(for) Mike to call Tegan.
c. *Mike is possible to call Tegan.

(6a) shows that the possible-construction can take a finite complement clause, and (6b) shows that it can take an infinitival complement clause, but only with the ‘case-marking’ complementizer *for*. I maintain the traditional assumption here that *for* carries some special case-checking ability in English which licenses a subject in a non-finite clause. This is therefore an instance in English where ECM licensing is not possible, and a subject raising configuration is not possible.⁶ In comparison, consider the Swahili examples in (7):⁷

⁶ I will assume that this lack of subject-to-subject raising is due to *possible* selecting for a full CP complement, which makes it a phase (restricting movement from out of the embedded clause).

⁷ My main Swahili consultant for this data was an L1 speaker of Swahili who grew up in Dodoma and currently lives in Dar-es-Salaam.

- (7) a. I-na-wezakana kwamba Maiko a-ta-m-pig-i-a Tegani simu.⁸ [Swahili]
 9S-PRS-possible that 1Michael 1S-FUT-1O-beat-APPL-FV 1Tegan phone
 ‘It is possible that Michael will call Tegan.’
- b. I-na-wezakana (*kwa) Maiko ku-m-pig-i-a Tegani simu.⁹
 9S-PRS-possible (*for) 1Michael INF-1O-beat-APPL-FV 1Tegan phone
 ‘It is possible for Michael to call Tegan.’
- c. *Maiko a-na-wezakana ku-m-pigia Tegani simu.
 1Michael 1S-PRS-possibleINF-1O-beat-APPL-FV 1Tegan phone

The class 9 subject agreements in (7) are default agreement forms, which I assume to agree with a null expletive. (7a) is equivalent to English, with a tensed CP complement of ‘possible’. (7b) is the direct English equivalent of a non-finite complement CP, though directly opposite of the English in that no complementizer may be used, and the overt NP *Maiko* is licensed nonetheless.¹⁰ Example (7c) is included merely to show that it is not possible to raise the embedded subject to matrix subject position, parallel to the English examples. The data from Digo display the same characteristics, as (8b)-(8c) have overt subjects of infinitives. Digo is a Bantu language spoken along the southern coast of Kenya (Digo data in this paper are via Steve Nicolle).

⁸ A note on the glossing conventions in this paper: cardinal numbers in glosses represent noun class (not person). Person features are represented with ordinal numbers. In addition, ‘S’ stands for ‘subject’ and ‘O’ stands for ‘object’, distinguishing subject and object agreement. Additional glosses include: FV, final vowel; INF: infinitive; PRS: present tense; FUT: future tense; APPL: applicative; PASS: passive; STAT: stative; SBJ: subjunctive; PRF: perfect; CONT: continuous; SEQ: sequential.

⁹ INF in the glosses here stands for ‘infinitive’, which I take to be the morphological realization of non-finite T.

¹⁰ Similar properties of infinitives in Bantu have been reported by Henderson (2009) and are briefly addressed in Carstens (1991).

- (8) a. I-na-wezekana kukala Mike a-nda-muiha Tegan. [Digo]
 9S-PRS-possible that 1Mike 1S-FUT-call 1Tegan
 ‘It is possible that Mike will call Tegan.’
- b. I-na-wezekana Mike ku-muiha Tegan.¹¹
 9S-PRS-possible 1Mike INF-call 1Tegan
 ‘It is possible (for) Mike to call Tegan.’
- c. Chahi i-na-wezekana mutu ku-olagb-w-a kpwa sababu ya mutu mnono sana.
 maybe 9S-PRS-possible 1person INF-kill-PASS-FV for reason of 1person 1good very
 ‘Maybe it is possible [for] a person to be killed because of a very good person.’

And, finally, the data in (9) show that the same pattern holds for Lubukusu, which is spoken in Western Kenya near the border with Uganda. (9a) has a finite embedded clause, and (9b) shows the overt NP *Sammy* as the subject of an infinitive clause.

- (9) a. Ka-nyal-ikhana mbo Sammy a-la-khila ku-mw-inyawwe o-kwo. [Lubukusu]
 6S-possible-STAT that 1Sammy 1S-FUT-win 3-3-game DEM-3
 ‘It is possible that Sammy will win the game.’
- b. 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.’

¹¹ Steve Nicolle points out to me that the subjunctive complement clause (*Inawezekana Mike amuihe Tegan*) is just as acceptable in this case. A full investigation of non-finite complement clauses needs to consider these different possibilities.

Therefore, the examples in (7), (8), and (9) from Swahili, Digo, and Lubukusu all demonstrate the stark contrast in licensing between Bantu and English. In addition, Case Theory has also traditionally been held to explain the distribution of NP subjects of infinitive clauses in other positions, as was shown in (3b) above, repeated here as (10):

- (10) *(For) Michael to call Tegan would be a good thing.

The presence of the Case-checking complementizer is necessary to license the subject of the non-finite clause, which in this instance is in subject position. As the data from Lubukusu show, however, this additional Case-checking apparatus is not required. Instead, overt NP subjects of infinitives are licensed in subject position as well, as shown in (11) - (13):

- (11) Sammy khu-khila ku-mw-inyawo o-kwo khu-la-sanga-sya mawe. [Lubukusu]

1Sammy INF-win 3-3-game DEM-3 15S-FUT-please-CAUS mother¹²

‘For Sammy to win the game will please his mother.’

- (12) Ba-ba-ana khu-khw-ola muchuli khu-la-m-bukiya.¹³

2-2-children INF-INF-arrive tomorrow 15S-FUT-1stSG.O-surprise

‘For children to arrive tomorrow will surprise me.’

- (13) Alfredi khu-khw-ola muchuli khu-la-khu-yeta khu-mala e-kasi yeno.

1Alfred INF-INF-arrive tomorrow 15S-FUT-1STPL.O-help INF-finish 9-work DEM

‘For Alfred to arrive tomorrow would help us finish the work.’

¹² 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).

¹³ Note that the doubled infinitive is a typical form for Lubukusu: the infinitive morpheme is reduplicated in certain phonological contexts.

There are several possible approaches to all of these data. First, we could claim that non-finite T is in fact *not* defective in Bantu languages, and can check Case just like finite T. While this might account for these facts, it would lose part of the motivation for Case theory in the first place, and would effectively result in Case features being present, but irrelevant to the syntax in any meaningful way. Furthermore, we will see other cases (like locative inversion, §2.2) where the Case-checking issue extends beyond non-finite contexts, suggesting an answer based on the properties of infinitives will be insufficient. Another alternative would be to claim that there is some additional Case-checking operation (apart from Agree on finite T) which checks nominative Case. There seems to be little empirical evidence for such an operation, however, which would instead remain purely stipulative. While these alternatives are discussed in somewhat more detail in the context of locative inversion below, the following sub-section addresses one more prominent alternative analysis for the data above.

2.1.2 Against a Raising-to-Object Account

The general exception to the prohibition of overt NPs as subjects of infinitives are those instances where a NP's Case may be checked by the matrix verb, often termed Exceptional-Case-Marking or Raising-to-Object constructions. I adopt the term Raising to Object (RtO) (cf. Postal 1974) due to the fact that these constructions in Bantu seem to be able to be identified by the fact that it is possible for the matrix verb to exhibit object marking, agreeing with the embedded subject. Consider the Digo example of a stereotypical RtO verb in (14), and the Swahili examples in (15):

(14) Ni-kubali ni-lol-e mi-fugoyo rero. [Digo]

1STSG.O-allow 1STSG.S-look-SBJ 4-flock today

‘Allow me to look at your flock today.’

(15) a. Ni-na-m-kubali a-som-e ki-tabu changu. [Swahili]

1STSG.S-PRS-1O-allow 1S-read-SBJ 7-book 7my

‘I am allowing him/her to read this book.’

b. Wa-toto w-ote wa-li-ni-taka ni-wa-p-e hera.

2-child 2-all 2S-PST-1STSG.O-want 1STSG.S-2O-give-SBJ money

‘All the children wanted me to give them money.’

In order for the arguments to hold for the data regarding subjects of infinitives in the previous sub-section, it is necessary to demonstrate that the *possible* verb in those cases does not license the subject of the infinitive, that is, that the *possible*-construction is not an RtO context.¹⁴ Using the object-marking diagnostic, (16)-(18) show that *possible*-constructions do not exhibit a licensing relationship between the matrix verb and the embedded subject, ruling out a RtO analysis to explain the presence of the overt subjects of infinitives.¹⁵

(16) I-na-(*m)-wezakana Maiko ku-m-pig-i-a Tegani simu. [Swahili]

9S-PRS-(*1O)-possible 1Michael INF-1O-beat-APPL-FV 1Tegan 9phone

‘It is possible (for) Michael to call Tegan.’

¹⁴ It should be noted that there are still control constructions in Bantu languages like Digo, Swahili, and Lubukusu utilizing infinitives, but their specific properties to my knowledge are largely unknown.

¹⁵ The presence of Raising-to-Object constructions themselves has often been attributed to Case Theory. See section 4.2 for a discussion addressing this question for Bantu.

(17) Kpwa hivyo ta-i-nda-(*mu)-wezekana mutu ku-chimbira mashaka higa. [Digo]

For these NEG-9S-PRS-(*1O)-possible 1person INF-flee 6problem these

‘Therefore it is not possible [for] a person to flee these problems.’

(18) a. *Ka-**mu**-nyal-ikhana khu-khila ku-mw-inyawawe o-kwo. [Lubukusu]

6S-1O-possible-STAT INF-win 3-3-game DEM-3

‘It is possible for him to win the game.’

b. Ka-nyal-ikhana niye khu-khila ku-mw-inyawawe o-kwo.

6S-possible-STAT 1s/he INF-win 3-3-game DEM-3

‘It is possible for him to win the game.’

For Lubukusu, while (18a) is ruled out, (18b) shows that pronominalization of the embedded subject results in a freestanding pronominal form, rather than an object marker on the verb, giving another example of an overt subject of an infinitive. Based on this evidence, we are forced to concede that if the overt subjects of the non-finite clauses discussed for Swahili, Digo, and Lubukusu above did in fact have uninterpretable Case features, they could not be checked in those constructions. If we instead adopt the analysis that Bantu languages do not have abstract Case features, this construction is actually predicted. I therefore interpret the constructions discussed above for evidence in support of the hypothesis advanced in (2), that languages may be parameterized with respect to whether they have Case features, and that Bantu languages do not have Case.

2.2 Implications of Bantu Locative Inversion

2.2.1 Locative Inversion agreement facts

Locative inversion constructions have been well-researched in English and Bantu, with their respective agreement properties being an interesting point of contrast. A basic example of English locative inversion is given in (19):

(19) a. Down the hill rolls the ball

b. Down the hill roll the balls

Generally the locative phrase has been considered to occupy normal subject position (cf. Collins 1997, Bresnan 1994, Bailyn 2004, among others, though compare Stowell 1981, Rizzi and Shlonsky 2006, Diercks to appear, Culicover and Levine 2001 for alternatives in certain cases). As can be seen in the contrast between (19a) and (19b), agreement on the verb in English is controlled by the postverbal logical subject.¹⁶ In many Bantu languages, however, the verb agrees with the pre-verbal locative phrase.¹⁷ The following data come from Digo and Kifuliiru, which is spoken in the eastern Democratic Republic of Congo (Kifuliiru data were provided by Roger and Karen Van Otterloo, see Van Otterloo and Van Otterloo to appear).

¹⁶ I use the term ‘logical subject’ as a pre-theoretic term to describe the postverbal argument that is the subject in non-inversion contexts. This is particularly useful for Bantu languages, as the preverbal locative phrase triggers subject agreement, arguably becoming the grammatical subject itself.

¹⁷ I refer the reader to the relevant literature on Bantu locative inversion, including Bresnan (1994), Bresnan and Kanerva (1989), Buell (2007), Demuth and Mmusi (1997), Diercks (to appear), and Marten (2006), among others.

(20) Pho muho-ni pha-tuluka ng'ombe sabaa za ku-nona. [Digo]

16.DEM river-LOC 16s.PST-emerge 10.cows seven of INF-be.fat

‘From the river emerged seven fat cows.’

(21) Kú-yì-kyó kí-tì kw-áàlì shòn-ír-ì ú-mú-lándírà. [Kifuliiru]

7-that.N-7 7-tree 17s-P2.ST climb-RS-FV 3-3-vine

‘On that tree had climbed a vine.’

As is evident in (20) and (21), verbs in Digo and Kifuliiru display subject agreement with the fronted locative phrase and do not agree with the logical subject. These basic agreement facts are replicated across a large number of Bantu languages.¹⁸

2.2.2 Parameters of Agree

A number of agreement facts like the locative inversion facts discussed in the previous section have led to proposals that Chomsky’s (2000, 2001) Agree relation ought to be parameterized to account for Bantu languages, specifically, that heads in Bantu languages agree with a structurally higher phrase, rather than a structurally lower one (see, for example, Baker 2008, Carstens 2005, Collins 2004). Though the implementation is different in each case, the gist of the idea is that agreement in Bantu is correlated with movement, and that parametric choices between Bantu and Indo-European explain the apparently spec-head agreement patterns that arise in Bantu languages (cf. Kinyalolo 1991; Baker 2003; Koopman 2000; Demuth and Harford 1999; among others on spec-head agreement in Bantu).

Carstens’ (2005) claim (similar to that of Collins 2004) is that EPP features are a sub-feature of uninterpretable ϕ -features, so that the checking of ϕ -features also necessitates the checking of

¹⁸ See Diercks (to appear) for further discussion and additional references.

EPP features, effectively linking agreement and movement in Bantu. On this account, if the ϕ -features of a head are checked via Agree with a goal, the goal NP must necessarily move to the specifier of that head to check its EPP feature. Baker (2008), on the other hand, claims that heads in Bantu languages actually probe upwards: EPP features are independently present on heads, and the movements which they trigger then place DPs in a configuration where they are able to trigger agreement on a structurally lower head. Crucially, Baker also claims that in Bantu languages Agree is not contingent on Case the way it is in Indo-European languages. Both of these claims together derive the possibility of verbs agreeing with locative phrases rather than their logical subject, as is the case with locative inversion.

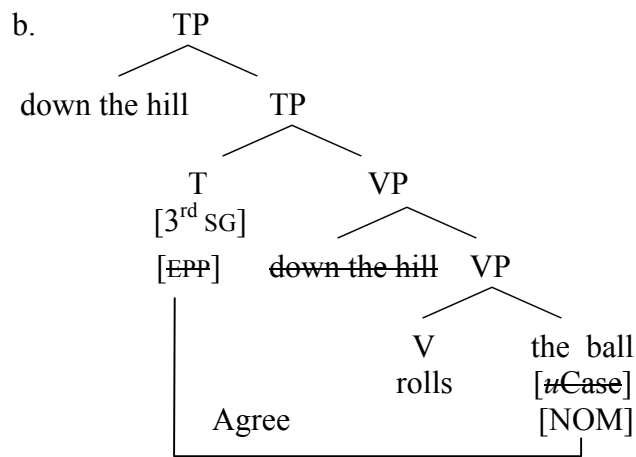
I assume Baker's approach for the course of this paper, along with the crucial component that EPP features are independent of Agree (and, therefore, movement can occur in contexts where agreement does not take place: Move is prerequisite for Agree, not *visa versa*). This provision accounts for the ability of subjects to move to subject position in non-finite clauses, as in the previous section. So though I claim that Bantu languages do not have case features, the classical notion of the EPP still holds—clauses must have subjects. The nature of this phenomenon is still very much an active research question, but I assume along with many other researchers that T has a lexical requirement that its specifier be filled, codified by an EPP feature on T. What is important to note at present, however, is that both Carstens (2005) and Baker (2008) conclude from a variety of Bantu data that (abstract) Case is not relevant to agreement patterns for Bantu languages.¹⁹

¹⁹ Mark Baker (personal communication) informs me that there is at least one Bantu language (Makhua, Mozambique; see van der Wal 2008) which has an agreement system that seems to pattern with Indo-European languages rather than other Bantu languages. KiKwaya (northwest Tanzania) and Lubukusu (Western Kenya) also show agreement with a postverbal subject in certain cases, though it is argued in (Diercks to appear) that, at least in Lubukusu, this is not a case of 'downward' agreement. These pan-Bantu claims should be understood to probably have been true about proto-Bantu, and are therefore usually true of its descendant languages, though not without exception.

2.2.3 Case in locative Inversion

The discussion of agreement in the previous section sets the stage to examine the agreement differences between Bantu and English locative inversion and their consequences for Case Theory. First, let us consider how Case functions in a Case-language like English:

(22) a. Down the hill rolls the ball.



When T—a probe due to its uninterpretable ϕ -features—is merged with VP, it probes downward looking for an uninterpretable Case feature.²⁰ Agree then values the ϕ -features of T and checks the u Case feature of *the ball*. At what point in the derivation the locative PP raises and checks the EPP feature on T is not relevant to our present concerns – crucial here is that these processes are separate.

To highlight the differences between English and Bantu, consider the Kilega example in (23), taken from Kinyalolo (1991).

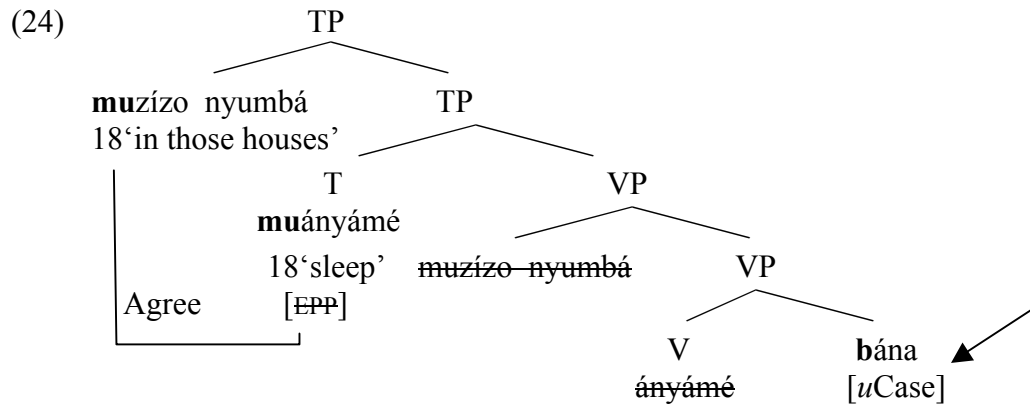
²⁰ I assume that the locative phrase in this instance is located in the specifier of VP, though that issue is not crucial to the analysis here. For a fuller analysis of English locative inversion, see Collins (1997) or Culicover and Levine (2001), among others.

(23) **Mu-zízo** nyumbá **mu-á-nyám-é** bána wálúbí. [Kilega]

18-10that 10house 18s-FUT-sleep-FV 2child one.day.period

‘There will sleep children in those houses tomorrow.’

We see here that in Kilega the verb agrees with the fronted locative phrase, rather than with the postverbal logical subject. This derivation is shown in (24). I assume V-T movement of verbs (following Ngonyani 1999 and 2001, among others).



It is clear in (24) that the Agree operation involves T and the locative phrase (whose class 18 locative gender features value the uninterpretable ϕ -features of the T head), but the logical subject is not involved in this agreement in any way.²¹ The question is raised, therefore, as to what happens to the uninterpretable Case feature of the postverbal logical subject *bána*.

Addressing this question, Baker (2003) proposes for Kinande that the fact that *in situ* subjects must lack the nominal augment is because augmented NPs require Case-checking, but

²¹ Again, I assume that the locative phrase originates in Spec, VP, mainly for presentation reasons. Though such an argument structure allows for the locative inversion without minimality violations, cases such as Digo and Otjiherero (discussed below) would still induce minimality violations, even if the locative were in Spec, VP. One approach to the problematic locality issues in locative inversion is that based on Chomsky (1995) taken by Collins (1997), proposing some notion of equidistance that comes into play because two arguments share the same projection. I assume some version of this story must extend at least to Digo and Otjiherero, if not to all cases of locative inversion.

non-augmented NPs are compatible with non-Case-checking.²² Carstens (2005), on the other hand, proposes that there is in fact a Case-checking operation which occurs following the movement and agreement relation between T and the locative phrase, where the Case feature on T initiates a subsequent Agree relation between T and the logical subject which is simply not realized morphologically. The implication of the Case parameter setting in (2), however, is that there simply is not a *u*Case feature on the logical subject to be checked.

The same Case-checking question arises with the locative inversion constructions in (25) from Digo, though perhaps more urgently given that Digo allows for locative inversion with unergative and transitive verbs.

- (25) a. Muho-ni pha-na-heka atu madzi.²³ [Digo]
 river-16LOC 16S-CONT-draw 2people 6water
 ‘People are drawing water at/from the river.’
- b. Tsaka-ni ku-na-imba atu.
 forest-17LOC 17S-CONT-sing 2people
 ‘People are singing in the forest.’
- c. Tsaka-ni ku-na-imba atu mawira.
 forest-17LOC 17S-CONT-sing 2people 6song
 ‘People are singing songs in the forest.’

²² Augments are additional prefixes that appear on nouns in many Bantu languages. While there is a limited amount of work on these morphemes, their full properties are still somewhat mysterious in many languages.

²³ Note that nominal locative morphology in Digo (as in Swahili) is deficient in distinguishing locative noun classes, though the distinctions do appear on elements which agree with the locative. I assume that the [-ni] locativizing morpheme is underspecified for specific noun class features, but simply realizes any locative noun class. The locative phrases still possess specific locative noun class features, however, which are then realized in agreement configurations.

d. Mo chumba-ni mu-na-andika mutu baruwa.

18DEM room-18LOC 18S-CONT-write 1person 9letter

‘Someone is writing a letter in the room.’

(25b) is an example of a simple unergative, while (25c) shows its transitive counterpart. (25a) and (25d) demonstrate locative inversion with transitive sentences.²⁴ In these instances there are now two arguments that, if they had uninterpretable Case features, would need to have these features checked and deleted.^{25,26}

There are various means by which this could be explained. First, it is possible to posit an Agree relation between T and the logical subject, but the presence of agreement with the fronted locative seems to counterindicate an agreement relation with the postverbal logical subject. As mentioned above, Carstens (2005) assumes that T agrees twice, once overtly with the fronted locative phrase, and a second instance covertly with the postverbal logical subject. There is no independent motivation for this second agreement relation, however, which is particularly troubling if this Agree relation is independent of the overtly manifest agreement.²⁷

A second alternative is that the *u*Case feature of the postverbal logical subject may be checked by some other operation designated for Case-checking (we could call it CASE). An

²⁴ Interestingly, (23a) is ungrammatical without the overt locative phrase (* Pha-na-heka atu madzi), while this is not the case with other Bantu ‘locative inversion’ constructions, though these are often analyzed as expletive constructions despite being structurally and morphologically very similar if not identical. What exactly allows locative inversion here, but disallows a transitive expletive construction, is an important question which due to space considerations I must leave to future research.

²⁵ An anonymous Syntax reviewer points out that on a standard account the objects in the transitive locative inversion constructions presumably would have their Case checked in the same manner that it is in non-inverted sentences. The data in (c) and (d) do make a relevant point, however, as in the case of unaccusatives it could be argued that a distinct Case is assigned to the complement of the verb (e.g. partitive case, cf. Belletti 1988). The transitive locative inversion constructions clarify the point, therefore, that the postverbal logical subject would necessarily be Case-less in these constructions (as the object would be assigned any relevant complement Case).

²⁶ Cf. Alexiadou and Anagnostopoulou (2001)

²⁷ An additional issue for this approach is that this ‘downward-looking’ Agree relation would behave differently than overtly manifest Agree relations in Bantu languages, in which it has been argued that heads agree with structurally higher phrases (cf. Baker 2008; Carstens 2005; Collins 2004).

anonymous *Syntax* reviewer suggests that a potential precedent for such an account comes from Belletti (1988), who claims that unaccusative verbs assign inherent partitive case to postverbal NP subjects. Besides the fact that Bantu languages do not appear to have the ‘definiteness effect’ that Belletti’s account derives for Italian (see Demuth 1990 for Sesotho, for example), this sort of local Case-checking relation would not account for the subjects of infinitives discussed above in §2.1, nor would it account for unergative and transitive locative inversion in Digo and Otjiherero. Rather, this CASE operation would need to be much more liberally licensed in order to account for all of the cases given here, which (like the second covert Agree relation suggested above) has no independent motivation and would merely be a theoretical stop-gap which conveniently checks Case when the standard mechanisms cannot.

The third possibility is that in these constructions Case is not checked at all, which is precisely the sort of construction that is predicted by the setting of the Case Parameter for Bantu in (2). It is important to note that there is recent work such as Epstein, Kitahara and Seely (2008), Bošković (to appear), and Carstens (to appear) which claims that uninterpretable features at the interface do not in fact cause a crash (rather, the interface simply ignores them, as they are irrelevant for that interface). Following Pesetsky and Torrego 2004/2007, these researchers argue that the uninterpretability of features is independent of their valuation, and for a derivation to converge it is valuation of unvalued features that is critical instead of checking uninterpretable features. But even on these assumptions, Case valuation then becomes the critical operation (rather than the checking of uninterpretable Case features), and the lack of valuation is subject to the same criticisms given above.²⁸ Therefore the only feasible theory which says that Case is not

²⁸ For the remainder of this paper, I will refer to Case-checking and Case-valuation jointly; below I adopt Carstens (in press) account of uninterpretable and valued gender features, but in keeping with the language to this point I will refer to this Case-checking operation as Case-checking/valuation.

checked/valued in these instances is one which states that there are no Case features there to be checked/valued in the first place, as set forth by the Bantu setting of the Case Parameter in (2).

2.3 Impersonal Passives

Perez [Harford] (1985) presents an argument very similar to this paper's claims, mainly that GB Case Theory should be parameterized due to evidence from Bantu languages. Her argument derives from a different class of data and her specific argumentation is embedded in GB theory, so her work merits revisiting from two perspectives: first, for the further evidence her research provides bolstering the argument for parameterization of Case, and second, for providing a Minimalist analysis of her data. Perez [Harford] refers to a construction which she terms the impersonal passive, a passivized verb that bears a generic, expletive-type agreement (and most relevant, does not agree with the underlying object, as the more standard passive construction does). Her examples from Shona (Zimbabwe) and Kiruúndi (Burundi) are included below.

- (26) a. 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.’
- b. Ha-ra-shoor-w-a u-bu-kawáavu mu-rí i-yi sokó.²⁹ [Kiruúndi]
 16S-PRS-sell-PASS-FV PP-14-rabbits 18-be this-9 9market
 ‘There are sold rabbits in this market.’

²⁹ For this data I use the glosses provided in Perez [Harford] (1985): in this case PP seems to represent what is referred to in Bantu as a pre-prefix, a vocalic addition to the normal CV- prefix structure that has been said to serve different functions (contributing to referential and presuppositional meaning, among other things).

The examples which she gives bear a striking resemblance to locative inversion, bearing a typically locative subject agreement, despite the fact that the locative has not raised to subject position. (26b) displays a locative subject agreement marker on the verb that is not the same noun class as the class 18 marker on the locative phrase, however, showing that the verb is not agreeing with any of the lower arguments, instead bearing a default agreement.

The argument in (Perez [Harford] 1985) is that the logical subject is not in a Case-marking position and therefore cannot receive Case, so the sentence should be ungrammatical. The same problem is encountered in a Minimalist architecture: the verb does not agree with the logical subject, and there is no apparent way in which the uninterpretable Case feature of the logical subject could be checked. For brevity's sake I will let the parallel discussion and derivations in the preceding section suffice, rather than repeating the arguments here.³⁰ The presence of such constructions in Bantu languages is therefore consistent with the approach to Case in Bantu proposed in (2).

An important question on this point has to do with the nature of expletive insertion.³¹ If arguments need not have their Case checked, what would restrict expletive insertion in Spec, TP to satisfy the EPP, leaving external arguments (unagreed with) *in situ* in Spec, vP? The result would be transitive expletive constructions of the sort that appear in Otjiihereho, where both verbal arguments occur postverbally, unagreed-with, as reported by Marten (2006: 115):

³⁰ An anonymous *Syntax* reviewer points out that impersonal passives where subject agreement is with the expletive subject are not limited to Bantu languages or typologically similar languages; in fact, they are even found in languages like French (Legendre 1990). For this reason I consider these data consistent with the conclusions argued for here, and not necessarily singularly definitive evidence. Truly, the strength of the argument in this paper is the large cluster of Case-theoretic problems that consistently appear in Bantu languages. I would suggest that individual constructions similar to those discussed here may appear in Case languages, with idiosyncratic mechanisms for Case-checking, but such a large clustering of problematic Case-theoretic data suggest that the Case Parameter is on the right track.

³¹ Thanks to an anonymous reviewer for raising this question.

- (27) Pé-rísá òvá-èndá òzò-ngòmbè. [Otjihereho]
 SC16.HAB-feed 2-guests 10-cows
 ‘There feed guests cattle.’

Not all Bantu languages allow for such constructions, however, which leads me to rely on a suggestion by Bowers (2002) that expletives in different languages may be specified to merge in different positions: expletives in English, for example, are merged in Spec, ν P (and expletives in Icelandic in Spec, CP). This non-Case-theoretic approach to expletive insertion is capable of ruling in cases like (27) for CP-expletive languages³², and ruling cases like (27) out in the relevant languages where expletives are merged in Spec, ν P.³³ This predicts that languages where expletives are merged in Spec, ν P should allow for expletive constructions with unaccusatives, which is in fact commonly found in many Bantu languages. These constructions are often referred to as ‘presentational focus’ constructions or simply as ‘presentational’ constructions (see Demuth and Mmusi 1997, among others).

2.4 Gender-Based Agree

The discussion in the preceding sections leaves us with an interesting question: what exactly are the consequences for the Minimalist architecture if there is no system of abstract Case in the language? What is it that makes a noun phrase a candidate for movement, or to check an EPP-feature? The relationship of Case and movement is often embedded in assumptions like those

³² Or, insertion in Spec, TP, though Bowers (2002) explicitly rules out this possibility.

³³ These data are also relevant to the SSG (subject-in-situ generalization) of Alexiadou and Anagnostopoulou (2001, 2007), which argues that structural Case is responsible for movement of DPs out of ν P, suggesting that data like (22) are ruled out in specifically those languages that have ν -to-T movement. Given that some Bantu languages do not allow for such transitive expletive constructions (TECs) or transitive locative inversion, for the Case Parameter in (1) to be valid, some explanation apart from the SSG must be given for the lack of TECs in certain languages. The principles of expletive insertion discussed in the §2.3 are one possibility, or it may find resolution in the status of ν -to-T movement in Bantu (cf. Carstens 2005), but I leave this specific issue as a matter for further research.

that say that only probes may bear EPP-features, or that Agree is a prerequisite to Move. But if Case features are not present to make a NP active as a goal of agreement (and we are unwilling to discard additional Minimalist architecture such as Activity), what is it that makes NPs active as goals for agreement?

Carstens (2005: 263-264) makes an interesting proposal in this regard; perhaps the feature that makes a noun phrase a goal for Agree in Bantu is gender. Developed independently from this paper, Carstens (to appear) builds on this idea, as well as on the division of interpretability and valuation discussed above (Epstein, Kitahara and Seely 2008; Bošković to appear, Pesetsky and Torrego 2004/2007). Her claim is that gender is an uninterpretable, valued feature, whereas Case is an uninterpretable, unvalued feature. Gender is understood as uninterpretable because by and large it has either no semantic correlates or highly limited semantic correlates, but rather is a purely grammatical system. The fact that gender is a valued feature accounts for its ability to serve as a goal for iterable Agree relations (e.g. DP-internal concord in Romance). On a clausal level, however, Carstens argues that systematic N-to-D movement in Bantu makes these gender features visible to the broader syntactic derivation (as opposed to Romance languages, for example, which lack systematic N-to-D movement). Carstens then proposes that it is valuation of features (rather than checking uninterpretable features) that deactivates a goal.

(28) **Goal Deactivation Principle:** Uninterpretable features are deactivated by valuation in the Agree relation. (Carstens to appear: #30)

Uninterpretable gender therefore makes DPs active as a goal for Agree, just as Case does, but given that gender features of NPs are lexically valued and as such enter the derivation already

valued, that goal never deactivates. In this way noun phrases in Bantu languages are always active to participate in Agree relations. The derivation of subject agreement in a basic sentence would proceed according to standard mechanisms, except that it is the gender feature of the external argument in Spec, ν P that makes that noun phrase active in Chomsky's sense. The general Minimalist architecture of Activity and Agree is left in place, however, with the sole difference being the feature that triggers activity. The empirical consequence of a valued Activity feature is the so-called "hyperactivity" of noun phrases in Bantu languages – because gender is an activity feature that cannot be deactivated, noun phrases will continue to participate in (phi-complete) agreement relationships (cf. Carstens 2001).

2.5 Intermediate Conclusions

This section has addressed a variety of further evidence from Bantu languages that the Case Parameter setting in (2) holds, mainly, that NPs can occur in positions where they could not have had their Case checked. There are further consequences of (2), however: in a non-Case language, not only should NPs occur in non-Case-checking positions, but NPs should continue to be syntactically active after their Case would have plausibly been checked. That is to say, we should find that NPs are able to move out of what are traditionally considered to be "Case-marked" positions, a conclusion which is also consistent with Carstens' (to appear) proposal regarding gender as an activity feature. Data relevant to this point are considered in the next section.

There are also additional theoretical consequences to the claim that gender features make a goal active for Agree. Because gender features are inherently valued (and are not valued in the course of a derivation), a noun phrase should be able to be a goal in multiple (phi-complete) Agree relations and thus should be able to trigger multiple instances of agreement. Secondly,

because Agree is not limited to particular Case relationships, any gendered noun phrase could satisfy agreement relationships with any head. We have already seen this effect in locative inversion constructions, where “subject” agreement on verbs may agree with locative phrases, in locative noun classes, rather than with their logical subjects – agreement is not constrained by any Case relationship.

To place the upcoming sections in context, much of the following data can be (in large part) explained on Carstens’ (to appear) account of gender as an activity feature; the aforementioned data discussing non-Case-checked NPs cannot, however. While she predicts so-called “hyperactivity” of NPs (i.e. NPs moving out of Case-marked positions to higher Case-marked positions, and triggering multiple agreement relations), Case features would still remain unchecked in the examples discussed above, necessitating an account which addresses Case as well.³⁴

The question arises, then, as to the connection between the proposed Case Parameter in (1) and the selection of activity features; I would suggest that the two are interrelated. It could be that the architecture of UG requires Activity features, so that if Case is not available, some other feature must be available as an Activity feature (gender, in Bantu) for the parameter settings to yield a possible language. That is to say, a language could not arise where the Case Parameter is set to ‘no Case features’, yet there is no other available Activity feature.³⁵ Alternatively, the Case Parameter might be re-imagined as an activation parameter, selecting

³⁴ An anonymous reviewer asks if there must always be one and only one feature active in A-relations: I am not opposed to the suggestion that there may be multiple Activity features on a single argument, but minimalist principles demand that it be demonstrated that both features are empirically necessary. At the very least, the arguments to this point require that Case *not* be one of those features, at least in these Bantu languages.

³⁵ This is consistent with the view that there may be multiple Activity features on a single argument.

among possible Activity features. I lean towards the former, as it allows for the possibility that gender be an activity feature in languages that nonetheless show Case-related properties.³⁶

3 NPs A-move out of “Case-marked” positions

This section examines evidence that shows that noun phrases in Bantu languages are not constrained by traditional notions of where NPs are Case-licensed. Under a theory of gender as an activity feature, many of these constructions fall under the rubric of “hyperactivity”. They are also relevant to Case-checking as well, however, as I will discuss in what follows.

3.1 Compound tense constructions

Carstens (2001) presents data on Bantu compound tense constructions in an argument against Chomsky’s (2000) conception of phi-completeness, that is, that there may be multiple Agree operations with a single argument, but only in the case that the uninterpretable ϕ -features of a probe are incomplete, agreeing only in a subset of the possible phi-features (as phi-incomplete Agree is assumed not to check Case). The standard example is from participle agreement in French, where the first agreement relation between the participle and the DP does not check the DP’s Case feature, and thus only the second does.

(29) a. Elle est morte. [French]

‘She is dead.’ (Carstens 2001, (1))

³⁶ This suggests a hierarchy of Activity features (e.g. Case >> Gender), though extended cross-linguistic study would be needed to verify the existence of such a hierarchy.



Past Participle Agreement

Subject Agreement: deletes Case feature of *elle*

deletes φ -features of *est*

Carstens' characterization of Chomsky's account is that both person and number together are necessary to delete Case. Carstens argues against this conclusion, however, citing evidence from compound tense constructions (CTs) in Swahili, where there are multiple instances of full- ϕ -feature agreement, as shown in (30). Many Bantu languages have similar constructions; I include some in (31) from Digo.

(30) a. Juma **a**-li-kuwa **a**-me-pika chakula. [Swahili]

1Juma 1S-PST-be 1S-PRF-cook 7food (Carstens 2001: (5))

‘Juma had cooked food.’

b. (Mimi) **ni-li-kuwa** **ni-ngali** **ni-ki-fanya** kazi.

(1stsg-pron) 1STSG.S-PST-be 1STSG.S-still 1STSG.S-PRF-do 9work

‘I was still working.’

(31) a. **U**-nda-kala **u**-na-m-lagiza ndi-go-gomba. [Digo]

2ndSG.S-FUT-be 2ndSG.S-CONT-3SG.O-command 1stSG.FUT-6REL-speak

‘You will be commanding him what I tell you.’

b. **A**-ka-kala **a**-ka-vuka rira lichigo vino a-na-phiya.

1s-SEQ-be 1s-PRF-cross 5DEM 5fence now 1s-CONT-go

‘She had crossed the fence and was now going.’

Following Carstens and Kinyalolo (1989), Carstens analyzes CTs as “a failure of aspect-bearing verbs to undergo raising,” so that an auxiliary is necessary to support the tense morpheme, and the subject then raises to the highest subject position.³⁷ Under their original analysis this subject-raising was Spec-to-Spec, which triggered agreement with both the Asp° and T° heads via spec-head-agreement (when the subject DP passed through Spec, TP and Spec, AspP, respectively).³⁸

(32) [_{T'} Juma_i [_{T'} *a-li-kuwa* [_{ASP'} t_i [_{ASP'} *a-me-pika*_v [_{VP} t_i [_{VP} t_v *chakula*]]]]]]]

The problem this poses for the theory as proposed in Chomsky (2000) is that both instances of agreement involve the same features, so that it is unclear why the first should not delete the Case feature of the subject while the second one does. Carstens' solution is a return to more traditional roots, claiming that there is a specific class of heads which may assign/check Case, mainly, heads which have an intrinsic structural Case value. Essentially, not all probes can check Case, and in the examples above the Case feature of the raised noun phrases is not deleted until the noun phrase agrees with the T head, which Carstens claims *does* have an intrinsic Case feature.

I would propose that the developments discussed to this point in this paper present us with a more elegant option. If Case features are simply not present in the derivation, the valuation/checking of Case features does not factor into the derivation of the structure and specifically the activity of the noun phrase. If instead gender features make a goal active, in a compound tense construction, the first instance of Agree would not handicap the ability of T to Agree a second time because gender features on NPs are valued before entering the derivation.

³⁷ Although see Henderson (2006b) for an alternative approach.

³⁸ Though the implications of this analysis do not change if implemented via Agree, rather than Spec-head agreement.

With the first instance of Agree the subject raises to Spec, AspP to check the EPP feature of Asp°. At this point a second Agree operation results in movement to Spec, TP and agreement appears on T.

If gender features are activity features, it is then unclear what role (if any) Case features would play in this derivation. One of the key roles of uninterpretable (or unvalued) features is to restrict the activity of noun phrases, which clearly does not happen in the case of CTs. While it could be assumed, as Carstens (to appear) does, that gender is simply an additional activity feature and Case features are rendered irrelevant by the presence of an additional activity feature, I would propose that the more elegant solution is that Case features are not present at all. The presence of both features as activity features would be more strongly motivated if it could be demonstrated that Case features nonetheless proved relevant in the derivation of other constructions. But as we saw in §2.1 for subjects of infinitives and §2.2 for locative inversion, this does not seem to be the case.

3.2 Raising constructions in Bantu

Even more directly related to the traditional Case-theoretic paradigms, raising constructions in Bantu languages have different properties than most Indo-European languages. In the Minimalist Program, a subject noun phrase in a tensed and agreeing clause ought to have its Case requirements satisfied and as such be inactive for further agreement operations, contrary to the Bantu facts, where subjects raise out of tensed and agreeing clauses.

3.2.1 Raising in perception verbs

As reported in Carstens and Diercks (to appear), raising verbs in (at least some) Bantu languages take finite complement clauses, rather than non-finite complement clauses. The English

paradigm in (33) is repeated from (4) above, showing that when the lower clause bears tense/agreement, raising is impossible (due to Case-theoretic reasons):

- (33) a. It seems that John is happy.
 b. *It seems John to be happy.
 c. John seems to be happy.
 d. *John seems that is happy.

As Carstens and Diercks (to appear) point out, however, the Luyia languages of Luusamia and Lubukusu show full tense and agreement in the lower clause, but still allow for raising (equivalent to the unacceptable English example in (33d)).³⁹ In (34a) the subject is in situ in the lower clause, whereas in (34b) it has raised to the matrix clause.

- (34) a. Ka-lolekhana (mbo) John ka-a-kwa. [Lubukusu]
 6S-seems (that) 1John 1S-PST-fell
 ‘It seems that John fell.’
 b. John a-lolekhana (mbo) ka-a-kwa.
 1John 1S-seems (that) 1S-PST-fell
 ‘John seems like he fell/John seems to have fallen.’

³⁹ Zeller (2006) discusses similar raising constructions in Nguni languages (Southern Bantu), with the major difference being that the embedded clauses in those cases are subjunctive, whereas in the Luyia and Digo cases reported here and in Carstens and Diercks (to appear), there is no evidence that the lower clauses are lacking in tense and agreement in any way.

In the paper Carstens and Diercks provide scope-related diagnostics to defend a raising analysis of these constructions. The systematic acceptability of raising out of a finite and agreeing embedded clause challenges the Case-theoretic explanation for raising verbs in English, where the lack of Case-checking in a non-finite clause is what is taken to be responsible for enabling raising of the subject to the matrix clause.

Raising constructions in Digo show the same properties, though the examples in (35) - (37) are a little less transparent due to their null subjects.⁴⁰

(35) ... ili **mu**-onekan-e **m**-na-hend-a manono. [Digo]

COMP 2ndPL.S-appear-SBJ 2ndPL.S-PRS-do-FV 6good (things)

‘... so that you be seen to be doing good.’

(36) a. ... hata ichikala **hu**-nda-onekan-a **hu**-ka-shind-w-a.

even if 1stPL.S-FUT-appear-FV 1stPL.S-PRF-defeat-PASS-FV

‘... even if we will be seen to have been defeated.’

b. I-na-onekan-a kukala **hu**-ka-shind-w-a.

9S-PRS-appear-FV COMP 1stPL.S-PRF-defeat-PASS-FV

‘It appears that we have been defeated.’

(37) a. **Hu**-na-onekan-a ta-**hu**-na chitu.

1stPL.S-PRS-appear-FV NEG-1stPL.S-have 7thing

‘We appear to have/as having nothing.’

⁴⁰ An anonymous reviewer notes that the Digo examples exhibiting raising lack a complementizer, whereas the non-raised expletive constructions do have a complementizer. Lusaamia and some Lubukusu speakers disallow a complementizer with a raised subject, though as example (31b) shows, other Lubukusu speakers *do* accept raised subjects with a complementizer. Carstens and Diercks (to appear) claims that in Lusaamia raising constructions the complement clause is TP, not CP, which may also hold for Digo (though this issue requires further research). I refer the reader to Carstens and Diercks (to appear) for a further discussion of these matters.

b. I-na-onekan-a kukala ta-**hu**-na chitu.

9S-PRES-appear-FV COMP NEG-ISTPL.S-have 7thing

‘It appears that we have nothing.’

(36b) and (37b) show that these are in fact raising constructions, as the matrix subject position may be filled by a null expletive triggering a default class 9 agreement. It is clear that the Case-theoretic analysis given for English does not extend to the Lubukusu and Digo constructions reported here, but these Bantu raising constructions are exactly what we would predict if the Case Parameter in (1) is set for Bantu languages such that there are no Case features in Bantu. The uninterpretable gender features of the embedded subject make it active for Agree, not Case features, as argued by Carstens and Diercks (to appear).⁴¹

3.2.2 Passive Raising Constructions

Perez [Harford] (1985) addresses a peculiar class of raising constructions in a variety of Bantu languages which offer an additional piece of evidence with respect to the Case Parameter. The English data below serve to introduce the basic paradigm of these raising constructions.

- (38) a. [_{IP} The thief is believed [_{IP} *t* to be hidden in the cave]].
- b. *[[_{IP} The thief is believed [_{CP} that [_{IP} *t* is hidden in the cave]]].
- c. [_{IP} It is believed [_{CP} that [_{IP} the thief is hidden in the cave]]].
- d. *[[_{IP} It is believed [_{IP} the thief to be hidden in the cave]]].

⁴¹An anonymous reviewer comments that similar constructions exist in Arabic and Polynesian languages, raising the question of how these constructions are analyzed in languages which *do* show overt case morphology on NPs. It is possible that the Case-theoretic issues with these constructions may be resolved in different ways in different languages, so that there is not a monolithic solution for all such constructions cross-linguistically. That being said, many morphologists have argued for an independent, post-syntactic mechanism for morphological case assignment (e.g. Marantz 1991, Bobaljik 2008), which may also be invoked to explain the presence of case morphology in Polynesian languages.

According to Perez [Harford], In (38a) the lower clause is non-finite, and I° therefore cannot assign Case. The subject ‘thief’ therefore receives its theta role from the lower verb, but must raise to the matrix Spec, IP to receive Case. This is licit because the higher verb is passive and does not assign a theta role to an external argument, meaning that ‘thief’ can raise to this higher subject position without receiving a second theta role. (38d) is ungrammatical for related reasons, as an overt noun phrase cannot remain in the embedded spec, IP because it cannot receive Case in this position (thus violating the Case Filter).

(38b) is ungrammatical because the lower CP is tensed and therefore the lower Spec, IP is a Case-assigning position, meaning that ‘thief’ has no motivation to move further. In this way A-movement out of a ‘Case-marking position’ is illicit—according to standard GB theory, (argumental) empty categories (A-traces here) are only licensed in Caseless positions. This, however, is why the noun phrase ‘thief’ is licensed in (38c), because ‘thief’ receives Case in this position.

Looking at Shona, Perez [Harford] notes that the expletive construction corresponding to the English (38c) is licit, but the English-like raising construction in (39b) is not possible. Instead, as in the raising verbs discussed in the previous section, the licit construction is raising out of a finite and agreeing embedded clause, as shown in (39c).⁴²

(39) 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.’

⁴² I leave a specific explanation for the ungrammaticality of the (38b) for future research. To my knowledge (at least) Lubukusu and Digo allow for raising out of non-finite lower clauses as well, so this unacceptability may not generalize to all Bantu languages.

b. *Mbavhá i-no-fungir-w-a *t* ku-vánd-á mú-bako.

9thief 9S-PRES-suspect-PASS-FV INF-hide-FV 18-cave

c. [_{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.’

According to GB theory (39c) should be impossible, as a noun phrase has moved from a Case-marked position to another Case-marked position. The presence of the expletive in (39a) makes it clear that the higher Spec, IP is not a theta-position, so the overt NP subject *mbavhá* must not have originated as subject of the matrix clause.⁴³ Looking at (39c), both the higher and lower verbs agree with the overt NP subject *mbavhá*. The conclusion then is that the NP *mbavhá* must have originated in the lower clause, despite the fact that it is a finite clause with a complementizer. Perez [Harford] goes on to provide similar data from two other Bantu languages, Kikuyu and Kiruundi. As we can see from (40), this same construction also occurs in Lubukusu:

(40) a. Ka-bul-ikhane mbo o-mw-ana ka-a-rura e-si-somelo. [Lubukusu]

6S-reveal-STAT that 1-1-child 1S-PST-leave 23-7-school

‘It was revealed that the child left school.’

⁴³ Patricia Schneider-Zioga (personal communication) points out the potential analysis for these constructions that the derived subject in these passives does not originate in the lower clause, but rather is an object of the matrix verb (a prolepsis analysis). It is unclear whether there is any independent empirical evidence for this conclusion, however, and the raising analysis is plausible given the raising out of finite clauses in perception verbs in these languages, discussed in §3.2.1.

b. O-mw-ana ka-bul-ikhane mbo ka-a-rura e-si-somelo.

1-1-child 1S-reveal-STAT that 1S-PST-leave 23-7-school

‘A child was revealed to have left school.’

The argument in Perez [Harford] (1985) is framed in terms of the theory of empty categories: in sentences like (39c) and (40b) there is a (A-)trace in a Case-marked position, which is disallowed by Case Theory. When we consider this from a Minimalist perspective, we find that the new framework does not buy us any further ground on resolving these conflicts. Take the simplified structure in (41), for the Lubukusu sentence in (40b):

(41) [_{TP} Omwana T° [_{VP} bulikhane [_{CP} mbo [_{TP} ~~omwana~~ T° [_{VP} karura esisomelo]]]]].⁴⁴
 child be-revealed that child left school

Focusing on the Case issues, the embedded probe T bears an EPP feature and raises the subject to Spec, TP, triggering Agree. According to standard assumptions, the Case feature of this DP is checked/valued at this point, and is no longer active as a goal for Agree. Nonetheless, the DP raises to the matrix clause and the matrix T head agrees with it. As with the perception verbs, these constructions are predicted by (2), as the Case-theoretic predictions do not hold here. If we assume that it is a noun phrase’s gender feature that makes it an active goal for Agree, and that the noun phrase does not bear uninterpretable Case features, it is not surprising that we would

⁴⁴ I treat the movement of the DP to matrix subject position as happening in “one fell swoop” from the lower Spec, TP to the higher Spec, TP rather than assuming that there is A’-movement to the specifier of CP (and then speculating as to the landing position of the subject in the higher clause). Either analysis gives problems to standard assumptions, yielding either a problem with look-ahead with the A’-movement analysis, or yielding problems for a theory of phases with an A-movement analysis. Given that the raised NP triggers subject agreement and is interpreted as a normal, non-focused subject noun phrase, I assume the (direct) A-movement account.

find raising out of a finite embedded clause: that subject is still as much of a candidate for agreement and movement as it was when it was first merged.

4 Extensions of the Case Parameter

As we have seen to this point, though it is an apparently drastic step to parameterize Case as proposed in (1) and as specified in (2) for Bantu, the preceding sections demonstrate that the predictions of this proposal as set forth in §1.3 are exactly what we find in Bantu languages. NPs can occur in what are considered to be non-Case-marking positions as subjects of infinitives (§2.1), and as verbal complements in locative inversion (§2.2), but NPs may also A-move out of Case-marking positions, as shown for compound tense constructions (§3.1) and raising constructions (3.2). This section considers some further extensions of the Case Parameter, including the implications of a particularly peculiar Bantu construction, Subject-Object inversion.

4.1 The Implications of Subject-Object Inversion

One additional point where the role (or non-role) of Case features is interesting is in Subject-Object inversion constructions. Consider (42) from Kinyarwanda, taken from Ndayiragije (1999: 400): (42a) is a basic transitive sentence, but in the example in (42b) the object has raised to subject position and triggers subject agreement, but is still interpreted as the object, but with different focal properties.⁴⁵

⁴⁵ I refer the reader to the relevant literature for a full discussion of these properties: see Ura (1996, 2000), Morimoto (2000, 2006), Barrett-Keach (1981), Ndayiragije (1999), Henderson (2006).

- (42) a. Abâna ba-á-ra-nyôye amátá. SVO [Kinyarwanda]
 2children 2S-PST-F-drink:PERF 6milk
 ‘Children drank milk.’
- b. Amátá y-á-nyôye abâna. OVS
 6milk 6S-PST-drink:PERF 2children
 ‘Children (not parents) drank milk.’ [Lit.: ‘Milk drank children.’]

While I will not offer a precise analysis of these constructions, the basic pattern itself is telling for the discussion at hand. It is well-known cross-linguistically that objects can take on subject properties such as nominative case and subject agreement, with the most common instance being in passive constructions. The problem that constructions like (42b) raise is that there is no evidence that the accusative case-marking ability of the verb in these cases should have been lost: there is no difference in verbal morphology, and specifically there is no passive morphology or passive interpretation. In this case, then, it is surprising to find an object able to take on subject properties.

This is not particularly surprising, however, if the predictions of Case Theory are taken out of consideration. In principle, then, any NP could be the subject (in terms of structural syntax, not thematic roles). This does not, however, rule out other general concerns in the grammar, specifically, locality. If subjects are merged into a higher position (Spec, *v*P) than objects are (within the VP), we would still expect that objects cannot move to subject position, as there is a closer potential target for movement, mainly, the logical subject in Spec, *v*P.

What this predicts, then, is that you should largely not find constructions such as these, except in special cases where a language possesses structural peculiarities which allow for this

basic locality problem to be circumvented. As expected given this restriction, S-O inversion seems to be duly restricted, reported to exist only in a small group of central Bantu languages.⁴⁶ Henderson (2006a) has proposed that the feature of these languages that allows for S-O inversion is that their subject position is actually Spec, CP, an A'-position. Because movement to this position is an A'-movement, it is not restricted by locality in the same manner that A-movement is.

Henderson's analysis does not preclude the Case problem, however, as on standard accounts we would still expect agreement to be linked with Case, and therefore would expect Case-related behaviors to still be relevant.⁴⁷ Yet, in these constructions a transitive object (presumably accusative-case-marked) triggers the presumably nominative-oriented subject agreement. I therefore would propose that it is the confluence of the nature of the subject position in languages like Kinyarwanda, and the absence of Case features from these languages, which together allow for S-O inversion to arise.

4.2 Further Predictions of the Case Parameter

Finally, I would like to address some significant residual issues that arise due to the proposal of a Case parameter. First, if the basic distribution of arguments (for example, constraining the number of arguments in a sentence) can still be considered to fall under the realm of Case theory, it need not be left unexplained in the system that I propose here. What I would suggest is that the number of arguments which a predicate maintains (together with the basic merge positions of those arguments) can for the most part be restricted by the dispersal of theta roles via Pure Merge

⁴⁶ Though admittedly it is premature to say that it is truly restricted in such a manner, as the state of our knowledge of its existence in many of the Bantu languages is limited at best.

⁴⁷ Henderson (2006a: 153) in fact proposes that agreement and Case be completely divorced, and that Case checking occurs completely independently of any agreement relationships. Given the lack of Case effects otherwise in the grammar of (most) Bantu languages, this raises the question of what if any empirical need there is in Bantu for a theory of Case. This paper, of course, claims that there is none.

(Chomsky 2000, 2001), or by whatever mechanism theta roles and theta structure is governed. Theta roles (and argument structure) are independently needed and independently constrain the number and types of arguments which a verb phrase may licitly contain, and as such there is no need to invoke a theory of abstract (uninterpretable) Case features to serve the same function.

The lack of Case also raises important questions for the class of verbs referred to here as raising-to-object verbs (RtO), or exceptional Case-marking verbs (ECM). As observed in §2, there are verbs in Bantu languages that have the properties of RtO verbs, mainly, that the subject of an embedded clause can appear to be licensed in some manner by the matrix verb, which I stated was realized in Bantu by the ability of the embedded subject to be object-marked on the matrix verb. This was shown in (14) and (15), with (43) repeated from (15a):

- (43) Ni-na-**m**-kubali a-som-e ki-tabu changu. [Swahili]
 1STSG.S-PRS-1O-allow 1S-read-SBJ 7-book 7my
 ‘I am allowing him/her to read my book.’

While a full analysis of RtO verbs is beyond the scope of the present paper, it is important to set forth a potential explanation for why this apparent Case-marking relationship still exists in Bantu languages which I have claimed do not in fact have Case features. There are two necessary components to the traditional analysis of RtO verbs: first, the matrix verb licenses accusative Case, and second, the embedded clause is structurally deficient (e.g. TP instead of CP), which enables the Case-checking relationship between the matrix verb and the embedded subject. I would propose that this structural analysis remains consistent for Bantu languages, in that embedded clauses in RtO constructions are TP rather than CP. I will also claim that there is

a licensing relationship between the matrix verb and the embedded subject, but it is not necessarily Case-related.

For this tentative analysis I rely on a proposal by Bowers (2002) for an object-licensing projection Transitive Phrase (TrP). Bowers argues that TrP is an independent projection that occurs below vP with distinctive (transitive) interpretive properties, and that this is the projection which performs accusative Case-checking on objects. Crucially, TrP has semantic properties apart from the mere structural properties of Case and Agreement (cf. AgrOP, Chomsky 1995), and on the strength of this claim I propose that it is present in Bantu languages despite the lack of Case, and bears an EPP feature capable of attracting DPs.

I would propose that the Bantu facts are therefore a result of the same structural configuration that results in RtO constructions in other languages: verbs like *want* select for a TP, rather than a CP, for their complement clause, as the question of Case-checking should be independent of the selectional properties of the verb. Raising-to-Object verbs are transitive, however, and as such have a Transitive Phrase, which bears an EPP feature which is satisfied by raising the embedded subject into the matrix clause (which is possible because of the smaller structure of the complement clause).⁴⁸ The specific source of object-marking in these constructions would depend on the language: if object marking is agreement, I would claim it is triggered if the embedded subject raises overtly to Spec, TrP. If object marking is an incorporated pronoun, I would claim it simply arises when the pronoun raises to the matrix clause, in the same manner as a full NP. While there is much work that needs to be done to account for the properties of Raising-to-Object verbs in Bantu, these comments should suffice to point towards a potential analysis for RtO phenomena.

⁴⁸ Though see Carstens and Diercks (to appear) for proposals regarding A-movement out of CP.

This argumentation recalls the point made in §2.2.2 that despite their lack of Case features, Bantu languages are nonetheless like the familiar Indo-European languages in that they have functional heads (e.g. T, Asp, and Tr) with lexical requirements that must be satisfied via Agree or Move. These heads are able to act as probes (valued by goals via Agree) and are able to attract phrases to their own specifiers. The main difference between Bantu and English, then, is that in Bantu languages goal noun phrases do not have a corresponding feature-checking/valuation requirement. In this way Bantu languages still have the common A-movements and EPP-type phenomena, but without the same restrictions that are imposed by Case features in a Case-language like English.⁴⁹

An additional point to address is the work of McFadden (2004, 2008), who claims that abstract Case does not exist, and instead the distribution of DPs is better explained by an analysis of selection by various heads of phrases with specific values of [+/-R], an interpretable feature on DPs which encodes referential (in)dependence (McFadden 2008: 22). I do not want to comment in depth on the main direction of that work, eliminating Case altogether, but rather to point out the differences with my own work. Whereas McFadden claims that Case must be eliminated, I claim that it should be parameterized, showing that Bantu languages lack many of the effects that Indo-European languages have of abstract Case. If anything, this work supports some notion of abstract Case (or something like it), as its absence is an explanatory mechanism for a large cluster of properties within Bantu languages (as compared to the properties of languages that have abstract Case features). If McFadden's analysis holds, that DP distribution is determined by selection and not licensing, the proposals of this paper would need to be reformulated, but the basic generalization remains: DPs in Bantu display a different distribution than in, for example, Indo-European languages.

⁴⁹ Thanks to an anonymous *Syntax* reviewer for their comments on this issue.

An additional point for future research has to do with passivization, which is a common operation in Bantu languages but which has traditionally received a Case-theoretic analysis. There is promise for analyzing passives without invoking Case; assuming that Spec, ν P is a non-thematic position in passive verbs, movement of the internal argument to subject position may be explained under a generalized theory of the EPP. The reason the object may (not must) move to subject position is that there is no external argument intervening, and an EPP feature (presumably on T^0) requires that subject position (Spec,TP) must be filled by something.⁵⁰ There are a number of empirical and theoretical questions remaining, however, including whether there are the same distinctions present in Bantu between CPs and DPs as exist in languages like English, and what the properties of by-phrases in Bantu passives are: these are both issues for future research.

5 Conclusions

5.1 Final thoughts

In this paper I proposed the Case Parameter in (1), which claims that the presence of uninterpretable/unvalued Case features is not a universal property of language, and proposed that the “no Case features” value of that parameter is realized in Bantu languages (see (2)). I then provided evidence from a variety of Bantu languages demonstrating that the predictions of (2) hold. Chomsky (2001: 4-6) claims that positing uninterpretable features should be the result of empirical observations, that is to say, that certain operations exist which must occur before a derivation hits Spell-Out. In Chomsky’s words, “uninterpretability of features—say, of phonological features, ϕ -features of T or its EPP-feature, or structural Case—is not ‘stipulated.’

⁵⁰This still raises the question of how to explain and constrain the presence of EPP features (or OCC features), a question which I do not attempt to address here.

The existence of these features is a question of fact: does L have these properties or not?”⁵¹ My claim is that Bantu languages, with respect to uninterpretable/unvalued Case features, do not in fact show the requisite properties.

This is not to say, of course, that construction-specific explanations cannot be made for each problematic construction that I have discussed in this paper. But I consider the question from this standpoint: if Bantu languages were the only languages linguists knew, would a theory anything like Case Theory have been proposed? It does not seem to me that it would have been. This certainly is not a sufficient argument, as we find properties of Universal Grammar latently in many languages. But the question can be phrased another way: what explanatory value does Case Theory have for Bantu languages? My claim is that it has little, or none, and hence the parameterization of Case Theory proposed in (1) and (2).

This proposal does not come without cost, however. The first is that the universal operation Agree may take on different mechanical properties in different languages: Activity is triggered by Case in some languages, but by gender in others. This consequence seems unavoidable in some measure or another, however, given how the agreement properties of Bantu languages differ from the Indo-European languages (and hence, Carstens’ (to appear) proposals regarding hyperactivity). As I have shown, however, the Case Parameter not only accounts for the more liberal distribution of NPs in Bantu (§2), but together with the necessary modification of Activity also explains a wide variety of unexpected agreement and raising phenomena (§3).

5.2 For future research

Returning to the parameterized accounts of agreement discussed in §2.2.2, it is possible that the Case Parameter in (1) could in fact be a more precise formulation of Collins’ (2004, Carstens’

⁵¹ Or, that unvalued features must be valued (see references in §2.2 above)

(2005), and Baker's (2008) proposals that there are languages where agreement doesn't track Case. It would seem that all of these languages would end up with the same problem—since Case is not checked via Agree, an entirely different system (or separate instances of unrealized Agree operations) would need to be motivated to account for Case-checking. It would be an interesting result, however, if at least some of those other languages which Baker notes have the same parameter settings as Bantu languages do in fact share some of the other characteristics discussed in this paper.⁵² If so, it would seem that whether or not Agree is linked with Case-checking could be derived from the value of the Case parameter value in (1), along with some mechanism built into the theory of Agree allowing it to find its goals in different manners (based on the features present in a language). That being said, there are languages among those noted by Baker where Agree is not dependent on Case which display overt case morphology on NPs (e.g. Burushaski and Warlpiri), which would seem to preclude the connection between (1) and Baker's 'Agree joined with Case' parameter. It could be that morphological case is a completely morphological phenomena which is not related to NP-licensing (as argued by Marantz 1991, Bobaljik 2008, and McFadden 2004, among others), or it could be simply that languages without Case features are a proper subset of the languages which Baker identifies as not having Agree linked with Case. This group of languages identified by Baker could then have Agree independent of Case for two reasons—either a given language has no Case features, or they are identified by Baker's parameters as belonging to a system separate from Agree.

In the end it seems that we must allow for more flexibility in some basic elements of the Minimalist architecture (e.g. basic feature inventories and Activity features). This of course still

⁵² Specifically, those languages which Baker identified in his survey of 108 genetically and areally diverse languages as having agreement apart from case-checking are the following: Zulu, Swahili, Kinande, Berber, Arapesh, Tariana, Fijian, Tukang Besi, Slave, Canela-Krahô, Jarawara, Georgian, Arabic, Persian, Warlpiri, Dani, Kewa, Burushaski, Mayali, Halkomelem, Tauya, Ojibwa, Nez Perce, Karok, Otomi, Zoque, Ika, Basque, I. Quechua, and Guaraní.

contributes to the expressed goal of generative syntax—to provide an analysis of the human faculty of language which is non-idiosyncratic and relevant for all languages.

6 References

- Alexiadou, A. and E. Anagnostopoulou. 2001. The subject-in-situ generalization and the role of Case in driving computations. *Linguistic Inquiry* 32: 193-231.
- , 2007. The subject-in-situ generalization revisited. In *Interfaces + recursion: Chomsky's minimalism and the view from syntax-semantics*, ed. U. Sauerland, H-M Gärtner, 31-60. Berlin: Mouton de Gruyter.
- Alsina, A. 2001. Is Case another name for grammatical function? Evidence from object asymmetries. In *Objects and other subjects: Grammatical functions, functional categories, and configurationality*, ed. W.D. Davies and S. Dubinsky, 77-102. The Netherlands: Kluwer Academic Publishers.
- Bailyn, J. 2004. Generalized inversion. *Natural Language & Linguistic Theory* 22: 1-49.
- Baker, M. 1996. *The polysynthesis parameter*. Oxford: Oxford University Press.
- , 2003. Agreement, dislocation, and partial configurationality. In *Formal Approaches to Function in Grammar*, ed. A. Carnie, H. Harley, and M. Willie, 107-132. Amsterdam: John Benjamins.
- , 2008. *The Syntax of Agreement and Concord*. Cambridge: Cambridge University Press.
- Barrett-Keach, C. 1980. The syntax and interpretation of the relative clause construction in Swahili. Ph.D. dissertation, University of Massachusetts.
- Belletti, A. 1988. The Case of unaccusatives. *Linguistic Inquiry* 19: 1-34.

- Bobaljik, J. 2008. Where's Phi? Agreement as a Post-Syntactic Operation. In *Phi-Theory: Phi features across interfaces and modules*, eds. D. Harbour, D. Adger, and S. Béjar, 295-328. Oxford: Oxford University Press.
- Bobaljik, J. and D. Jonas. 1996. Subject positions and the roles of TP. *Linguistic Inquiry* 27: 195-236.
- Bobaljik, J. and S. Wurmbrand. 2006. Case in GB/Minimalism. Ms, University of Connecticut.
- Bošković, Ž. to appear. On unvalued Uninterpretable Features. In *The Proceedings of NELS 39*.
- Bowers, J. 2002. Transitivity. *Linguistic Inquiry* 33: 183-224.
- Bresnan, J. 1994. Locative inversion and universal grammar. *Language* 70: 72-131.
- Bresnan, J. and J. Kanerva. 1989. Locative inversion in Chichewa: A case study of factorization in grammar. *Linguistic Inquiry* 20: 1-50.
- Buell, L. 2007. Semantic and formal locatives: Implications for the Bantu locative inversion typology. *SOAS Working Papers in Linguistics* 15: 105-120.
- Carstens, V. 1991. The morphology and syntax of determiner phrases. Ph.D. dissertation, UCLA.
- , 2001. Multiple agreement and Case deletion: Against ϕ -(in)completeness. *Syntax* 3:147-163.
- , 2005. Agree and EPP in Bantu. *Natural Language & Linguistic Theory* 23: 219-279.
- , to appear. Hyperagreement and hyperactivity in Bantu. Ms, University of Missouri-Columbia. To appear in *Lingua*.
- Carstens, V. and M. Diercks. to appear. Parameterizing Case and Activity: Hyper-raising in Bantu. To appear in *The proceedings of NELS 40*.
- Carstens, V. and K. Kinyalolo. 1989. On IP structure: Tense, aspect, and agreement. Ms, Cornell University and UCLA.

- Chomsky, N. 1981. *Lectures on government and binding*. Dordrecht: Foris.
- , 1986. *Knowledge of language: Its nature, origin, and use*. Praeger: New York.
- , 1995. *The Minimalist Program*. Cambridge: MIT Press.
- , 2000. Minimalist inquiries: The framework. In *Step by step: Essays in honor of Howard Lasnik*, ed. R. Martin et al, 89-155. Cambridge: MIT Press.
- , 2001. Derivation by phase. In *Kan Hale: A life in language*, ed. by M. Kenstowicz, 1-52. Cambridge: MIT Press.
- Collins, C. 1997. *Local economy*. Cambridge: MIT Press.
- , 2004. The agreement parameter. In *Triggers*, eds. A. Breitbarth, H. van Riemsdijk. Mouton de Gruyter, Berlin, pp. 115-136.
- Culicover, P. and R. Levine. 2001. Stylistic inversion in English: A reconsideration. *Natural Language & Linguistic Theory* 19: 283-310.
- Demuth, K. 1990. Locatives, impersonals, and expletives in Sesotho. *The Linguistic Review* 7: 233-249.
- Demuth, K. and C. Harford. 1999. Verb raising and subject inversion in comparative Bantu. *Journal of African Languages and Linguistics* 20: 41-61.
- Demuth, K. and S. Mmusi. 1997. Presentational focus and thematic structure in comparative Bantu. *Journal of African Languages and Linguistics* 18: 1-19.
- Diercks. To appear. The morphosyntax of Lubukusu locative inversion and the parameterization of Agree. To appear in *Lingua*.
- Diesing, M. 1992. *Indefinites*. Cambridge: MIT Press.
- Epstein, S., H. Kitahara, and T.D. Seely. 2008. Uninterpretable features: What are they and what do they do? Ms, University of Michigan, Eastern Michigan University.

- Kayne, R. 1994. *The antisymmetry of syntax*. Cambridge: MIT Press.
- Kinyalolo, K. 1991. Syntactic dependencies and the SPEC-head agreement hypothesis in Kilega. Ph.D. dissertation, UCLA.
- Koopman, H.J. 2000. *The syntax of specifiers and heads*. London: Routledge.
- Fillmore, C. 1968. The case for case. In *Universals in Linguistic Theory*, ed. Emmon, Bach and Harms, 1-88. New York: Holt, Rinehart, and Winston.
- Haegeman, L. 1994. *An introduction to Government and Binding Theory*. Oxford: Blackwell.
- Henderson, B. 2006a. The syntax and typology of Bantu relative clauses. Ph.D. dissertation, University of Illinois at Urbana-Champaign.
- 2006b. Multiple agreement, concord, and Case checking in Bantu. In *Selected Proceedings of the 36th Annual Conference on African Linguistics*, eds. O. Arasanyin and M. Pemberton, 60-65. Somerville, MA: Cascadilla Proceedings Project.
- 2009. Copy Control in Chimwiini? Paper presented at the Mid-America Linguistics Conference, University of Missouri, October 10, 2009.
- Legate, J. 2008. Morphological and abstract Case. *Linguistic Inquiry* 39.1: 55-101.
- Levin, B. and M. Rappaport Hovav. 1995. *Unaccusativity at the syntax-lexical semantics interface*. Cambridge: MIT Press.
- Marantz, A. 1991. Case and Licensing. In *Proceedings of the Eighth Eastern States Conference on Linguistics*, eds. G.F. Westphal, B. Ao, and H-R. Chae, 234–253.
- Markman, V. 2009. On the parametric variation of case and agreement. *Natural Language & Linguistic Theory* 27: 379-426.
- Marten, L. 2006. Locative inversion in Otjiherero: More on morpho-syntactic variation in Bantu. *ZAS Papers in Linguistics* 43: 97-122.

- McFadden, T. 2004. The position of morphological case in the derivation: A study on the syntax-morphology interface. Ph.D. dissertation, University of Pennsylvania.
- , 2008. Against abstract Case: Licensing vs. selection of embedded subjects. Handout from talk given at Brandeis University, April 3, 2008.
- Morimoto, Y. 2000. Discourse configurationality in Bantu morphosyntax. Ph.D. dissertation, Stanford University.
- , 2006. Agreement properties and word order in comparative Bantu. *ZAS Papers in Linguistics* 43: 161-187.
- Ndayiragije, J. 1999. Checking economy. *Linguistic Inquiry* 30: 399-444.
- Ngonyani, D. 1999. X⁰-Movement in Kiswahili Relative Clauses. *Linguistic Analysis* 29: 137-159.
- , 2001. Evidence for Head Raising in Kiswahili Relative Clauses. *Studies in African Linguistics* 30: 59-73.
- Nicolle, S. in prep. A grammar of Digo. Ms, SIL.
- van Otterloo, R. and K. van Otterloo. to appear. A grammar of Kifuliiru. SIL International.
- Perez, C. Harford. 1985. Aspects of complementation in three Bantu languages. Ph.D. dissertation, University of Wisconsin-Madison.
- Pesetsky, D. and E. Torrego. 2004/2007 The Syntax of Valuation and the Interpretability of Features. In *Phrasal and Clausal Architecture: Syntactic Derivation and Interpretation*, ed. S. Karimi, V. Samiian and W. Wilkins. Amsterdam: Benjamins.
- Postal, P. 1974. *On raising: One rule of English grammar and its theoretical implications*. Cambridge: MIT Press.

- Rizzi, L. and U. Shlonsky. 2006. Satisfying the subject criterion by a non subject: English locative inversion and Heavy NP shift. In *Phases of interpretation*, ed. M. Frascarelli, 341-362. Berlin: Mouton de Gruyter.
- Seidl, A. and A. Dimitriadis. 1997. The discourse function of object marking in Swahili. *Papers from the Regional Meetings, Chicago Linguistic Society* 33: 373-387.
- Sigurðsson, H. 1991. Icelandic Case-marked PRO and the licensing of lexical arguments. *Natural Language & Linguistic Theory* 9: 327-363.
- , 2003. Case: Abstract vs. morphological. In *New Perspectives on Case Theory*, eds. E. Brandner and H. Zinsmeister, 223-267. Stanford: CSLI Publications.
- Stowell, T. 1981. Origins of phrase structure. Ph.D. dissertation, MIT.
- Ura, H. 1996. Multiple feature checking: A theory of grammatical function splitting. Ph.D. dissertation, MIT.
- , 2000. *Checking theory and grammatical functions in Universal Grammar*. Oxford: Oxford University Press.
- van der Wal, J. 2008. Agreement inthetic sentences in Bantu and Romance. In *The Bantu-Romance Connection. A comparative investigation of verbal agreement, DPs and information structure*, ed. C. De Cat and K. Demuth, 323-350. Amsterdam: John Benjamins.
- Zaenen, A., J. Maling, and H. Thráinsson. 1985. Case and grammatical functions: The Icelandic passive. *Natural Language & Linguistic Theory* 3: 441-483.
- Zeller, J. 2006. Raising out of finite CP in Nguni: The case of *fanele*. *South African Linguistics and Applied Language Studies* 24: 255-275.

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