

Evidence for abstract Case in Bantu

Jenneke van der Wal*

University of Cambridge, United Kingdom

Received 30 January 2015; received in revised form 6 July 2015; accepted 9 July 2015
Available online



Abstract

In his paper 'Parameterizing Case: evidence from Bantu', [Diercks \(2012\)](#) proposes a parameterized theory of abstract Case, where some languages do have Case, and others do not. Bantu languages, according to him, do not have uninterpretable Case features in their feature inventories. This paper shows, first, that the Bantu languages Makhuwa and Matengo are interesting counterexamples, concluding that – although Case may be parameterized – microvariation within the Bantu language family shows that it is not correct to characterize the whole language family as Caseless. Secondly, the question is addressed what kind of evidence is needed for postulating a system of abstract Case in a particular language, concluding that Makhuwa and Matengo, unlike the languages [Diercks \(2012\)](#) analyses, plausibly give sufficiently rich and unambiguous evidence for postulating an abstract nominal licensing system, for the language learner as well as for the linguist.

© 2015 Elsevier B.V. All rights reserved.

Keywords: Abstract Case; Bantu; Finiteness; Learnability; Morphosyntax

1. Introduction: parameterizing Case

The Minimalist Program has inherited from Government and Binding some version of the Case Filter ([Chomsky, 1981](#); [Vergnaud, 1977](#)): even in languages lacking morphological case, it is assumed that overt DPs need to be Case-licensed. This abstract Case is semi-independent of the many different surface manifestations of morphological case and is taken to account for the distribution of (overt) DPs as well as phenomena such as A-movement. In Minimalism, Case is often reduced to an Agree relation ([Chomsky, 2000](#)),¹ where nominals enter the derivation with an uninterpretable Case feature [uCase] that needs to be valued in the course of the derivation. [Diercks \(2012\)](#) critically evaluates the universality of Case theory in his paper 'Parameterizing Case: evidence from Bantu'. If Case is a feature like any other grammatical feature, [Diercks \(2012\)](#) reasons, languages can vary as to whether they have this feature, just like languages can optionally select other features (like mood or evidentiality). Logically, this leads to the parameterization of Case, where some languages do and some do not select [uCase] in their inventories:

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

* Correspondence to: Faculty of Modern and Medieval Languages, Sidgwick Avenue, Cambridge CB3 9DA, United Kingdom.
Tel.: +44 (0)1223 760820.

E-mail addresses: gjv23@cam.ac.uk, jennekevanderwal@gmail.com.

¹ There is a debate about how Case should be treated in a Minimalist theory of syntax (cf. [Chomsky, 2000](#); [Pesetsky and Torrego, 2001](#)). In this paper I shall leave these to one side and keep to [Diercks' \(2012\)](#) interpretation of Case.

His proposal for parameterization is inspired by Perez's [Harford] (1985) claim that Case is inoperative in Bantu languages. As Bantu languages do not have morphological case marking on nouns, the question of abstract Case has not been addressed much in Bantu linguistics, but Diercks (2012:254) makes the claim explicit by arguing that "Bantu languages do not have uninterpretable Case features in their feature inventories" (Diercks, 2012:254).

- (2) Case Parameter setting for Bantu:
Uninterpretable Case features are not present

Diercks examines 4 phenomena where Case may be expected to play a role, showing that the Bantu languages that he studies do not display the expected behavior if Case licensing were required for every overt DP. These phenomena can be taken as diagnostics for abstract Case in linguistic theory (cf. Sheehan and van der Wal, Submitted), but should equally be seen as cues for the language learner to discover the licensing mechanism. A major question for linguists as well as first language acquirers is thus what kind of evidence is needed for postulating a system of abstract Case in a particular language.

This paper addresses that question by following up on a footnote in Diercks (2012:254), which is a qualification on the Case parameter setting for Bantu (2): "such macroparametric claims must be tempered by allowing individual language differences". Such microvariation is indeed found, as shown by the data from Matengo and Makhuwa in this paper. The four diagnostics applied by Diercks (2012) show that Matengo and Makhuwa pattern different from the languages discussed by Diercks, and a novel diagnostic also indicates that in these two languages there may be enough evidence in the input for language learners (and linguists) to detect a licensing system of abstract Case. Furthermore, this diagnostic also suggests that the presence or absence of Case may not be a macroparameter, but can be absent in one area of the language (here: nominative) but present elsewhere (e.g. the prepositional domain).

The paper is organized as follows. Section 2 discusses how morphological marking on nominals, which one may think of as morphological Case marking, is largely unrelated to abstract Case in Bantu languages. Section 3 addresses the link between (subject) agreement and (nominative) Case, which is absent in the languages Diercks studies, but consistent in Matengo and Makhuwa. A third diagnostic used by Diercks is the occurrence of overt subject DPs in non-finite clauses, where nominative Case is not licensed, which is discussed in Section 4. This section also addresses the issue of which aspect of finiteness might be related to Case marking. Section 5 introduces an additional diagnostic which concerns the licensing of an overt agent DP in a passive clause. Finally, Section 6 addresses [uCase] as an activity feature, relating to the phenomenon of 'hyperactivity' (Carstens, 2011) where DPs move through multiple Case positions. For the last four diagnostics, Matengo and Makhuwa are shown to behave differently from the languages Diercks (2012) analyses, displaying evidence for the presence of Case. The conclusion is that these languages, unlike the languages Diercks (2012) analyses, plausibly exhibit enough concrete evidence to postulate an abstract Case system, for the language learner as well as for the linguist.

2. Absence of morphological case in Bantu

The first diagnostic Diercks (2012) applies is the presence/absence of morphological case. Even if there may crosslinguistically not be a one-to-one mapping between abstract Case and morphological case realization, there must be *some* relation (Legate, 2008), hence morphological case should be indicative of abstract Case. However, this diagnostic only holds in one direction: if a language shows morphological case, it is assumed to have abstract Case (or else the morphological component has nothing to spell out), but the absence of morphological case is compatible with either presence or absence of abstract Case.

The 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" (Diercks, 2012:355). This is illustrated in (3) where the noun *omuwala* 'girl' has the same form in subject and object function.

- (3) a. Y-à-lábà òmùwálà. Luganda (JE15)²
1_{SM}-PST-see 1.girl
'He saw the girl.'
- b. Òmùwálà y-à-mú-làbà.
1.girl 1_{SM}-PST-1_{OM}-see
'The girl saw him.'

² The Bantu languages are conventionally classified by a letter and a number, the letters referring to geographical zones, according to the updated Guthrie (1948) classification by Maho (2009).

A second area where morphological case might be suspected are the so-called “tone cases” found in some Western Bantu languages (Blanchon, 1998, 1999; Kavari et al., 2012; Schadeberg, 1986). In this system, the tonal nominal inflection varies according to different syntactic contexts, as illustrated in (7): the tone pattern on *otjihavero* ‘chair’ starts with LL in the Default case (glossed with ‘D’, used for the subject in (7a)) but with LH for the Complement case (glossed with ‘C’, used for the object in (7b)).

- (7) a. $\dot{O}tj\dot{i}$ -hávéro tj-á ù. Otjiherero (R30)
 7_D -chair $7_{SM-PAST}$ fall.down
 ‘The chair fell down.’
- b. Vé múná $\dot{o}tj\dot{i}$ -hávéro
 $2_{SM.HAB}$ see 7_C -chair
 ‘They usually see the chair.’ (Kavari et al., 2012:318)

This appears to correspond to nominative and accusative case (König, 2008:205–222). However, it can be shown that the tone cases are not unambiguously related to grammatical function (though languages may develop this function, see König, 2008). I mention three of the many arguments to distinguish tone cases in Otjiherero from more familiar systems of case marking. First, the use of the Complement or Default tone case is in the majority of sentences determined by the tense (8).

- (8) a. *habitual: always complement case*
 Vé múná $\dot{o}v\dot{i}$ -kùryá (*òvì-kùryá). Otjiherero
 $2_{SM.HAB}$ see 8_C -food 8_D -food
 ‘They usually see food.’
- b. *present: always default case*
 Má-vé múnú $\dot{o}v\dot{i}$ -kùryá (*òvì-kùryá).
 $PRES-2_{SM}$ see 8_D -food2 8_C -food
 ‘They are seeing food.’ (Kavari et al., 2012: 321–322)

Second, there is a choice between the Default and Complement tone case in the negative factive habitual which is determined by information-structural factors, rather than syntactic, i.e. the Complement form indicates focus on the postverbal element (9a).

- (9) a. Ká-tù hòng-à òvá-nátjè. Otjiherero
 $NEG-1_{PL.SM}$ teach-FS 2_C -children
 ‘We never taught *children* (but possibly other people).’
- b. Ká-tù hòng-à òvâ-nátjè.
 $NEG-1_{PL.SM}$ teach-FS 2_D -children
 ‘We do not professionally teach children (nor any other people).’ (Kavari et al., 2012:325)

Third, not only arguments but also adverbs are marked by these same cases, as shown in (10). For further argumentation and an analysis of the tone case system in Otjiherero, see Kavari et al. (2012).

- (10) a. Mbì ryá òn-yámà $\dot{o}n$ -gùróvâ. Otjiherero
 $1_{SG.SM.HAB}$ eat 9_C -meat 9_D -evening
 ‘I usually eat meat in the evening.’
- b. $\dot{O}n$ -gùróvâ mbì ryá òn-yámâ.
 9_D -evening $1_{SG.SM.HAB}$ eat 9_C -meat
 ‘In the evening I usually eat meat’
- c. Mbì ryá $\dot{o}n$ -gùróvâ.
 $SM1_{SG.HAB}$ eat 9_C -evening
 ‘I usually eat in the evening.’ (Kavari et al., 2012:330)

A third morphological distinction that could be related to case is the variation between nouns with and without an augment or pre-prefix, e.g. *u-muntu* vs. *muntu*, respectively. (Halpert, 2012a, 2013) suggests that in Zulu the augment serves to

license DPs.⁴ She shows that augmentless DPs have a very restricted distribution similar to that of bare NPs in Romance languages: augmentless nominals are licensed under negation, and only within the vP domain. In (11), the augmentless form *muntu* is only allowed in a vP-internal position, whether in the lower (a) or higher (c) clause.

- (11) a. A-*ngi-sho-ngo* [ukuthi ku-fik-e muntu].
 NEG-1SG.SM-say-NEG.PAST that 17SM-arrive-PERF 1.person
 ‘I didn’t say that anyone came.’
- b. *A-*ngi-fun-i* [ukuthi muntu a- pheke iqanda].
 NEG-1SG.SM-want-NEG that 1.person 1SM.SJ-cook 5.egg
- c. A-*ngi-fun-i* muntu_i [ukuthi t_i a- pheke iqanda].
 NEG-1SG.SM-want-NEG 1.person that 1SM.SJ-cook 5.egg
 ‘I don’t want anyone to cook an egg.’ (Zulu, Halpert, 2012a: 164)

Halpert argues that, even if Zulu may not show evidence for nominative Case, it does show Case effects in the vP. It remains an open question whether the restricted contexts (negation, wh items and DP-internal positions) in which augmentless nominals are allowed provide enough evidence for a language acquirer to postulate the presence of an abstract Case licensing mechanism in Zulu (and Xhosa and Kinande, see (Carstens and Mletshe, 2013) and (Progovac, 1993), respectively).⁵

We conclude that there is no consistent case marking for Bantu languages overall, and that the potential relevance of the discussed morphological/tonological distinctions to structural Case should be established on a language-particular basis. Furthermore, the absence of other morphological case marking in Bantu languages is compatible with the absence of [uCase] features.

3. Dissociation of Case and Agree

Diercks’ (2012) second diagnostic are the subject agreement patterns in Bantu languages. If Case is not marked on the noun (the dependent), it may be marked on the Case-licensing verb (the head – cf. Nichols, 1986, 1992). The obligatory subject agreement on the verb in Bantu languages is thus a good candidate to correlate with licensing case.⁶ If this is so, subject agreement is expected to always be with the nominative DP (assuming T to value nominative), whether in canonical active SVO sentences or in other word orders. This can be illustrated in English: in an expletive construction like (12b), the verb agrees with the postverbal nominative plural subject. The same is found in the locative inversion construction in (12c).

- (12) a. The guests appeared at the entrance of the college.
 b. There were guests in the dining hall.
 c. At the table were sitting some of the invited guests.

In a language without Case, Diercks argues, we would not expect there to be a similarly strict relation between agreement and the subject. Indeed, it is well known that ‘subject’ agreement is more flexible in many Bantu languages. Agreement on the verb is expressed by a prefix, referred to as the subject marker. In a canonical SVO sentence, this subject marker agrees in noun class with the preverbal subject, but in subject inversion constructions we find different agreement patterns cross-linguistically (Marten and van der Wal, 2015). For example, in Default Agreement Inversion, the subject marker on the verb can be in a default class: class 17 *go-* in (13) and not class 2 *ba-* of the postverbal subject.

- (13) a. Basadi ba-opela mo-kereke-ng. Tswana (S31)
 2.women 2SM-sing 18-9.church-LOC
 ‘The women are singing in the church.’

⁴ Note that this is the opposite of Baker (2003) who suggests that augmentless nouns in Kinande do *not* need to be Case licensed.

⁵ Note that the absence of the augment functions differently in different Bantu languages and has been related to specificity and focus (see a.o. Asimwe, 2014; De Blois, 1970; Hyman and Katamba, 1993; van der Wal and Namyalo, Submitted).

⁶ There are many (case-marking) languages where agreement does not correlate with Case, specifically also in ergative languages (Moravcsik, 1978; Woolford, 2006 and others).

- b. Mokereke-ng go-opela basadi.
18-9.church-LOC 17_{SM}-sing 2.women
'in the church there are women singing'
- c. Go-opela basadi.
17_{SM}-sing 2.women
'There are women singing.' (Creissels, 2011, adapted)

In Locative Inversion the subject marker agrees with the preverbal locative DP, as in (14).

- (14) a. A-lendô-wo a-na-bwérá ku-mu-dzi. Chichewa
2-visitor-2.DEM 2-REC PST-COME 17-3-village
'Those visitors came to the village.'
- b. Ku-mu-dzi ku-na-bwérá a-lendô-wo.
17-3-village 17_{SM}-PST-COME 2-visitor-2.DEM
'To the village came those visitors.'
- c. Pa-m-chenga p-a-ima nkhandwe.
16-3-sand 16_{SM}-PERF-stand 9.fox
'On the sand is standing the fox.' (Bresnan and Kanerva, 1989)

If we conclude that it is not nominative Case that determines the agreement on the verb, what is the probe sensitive to? The Default Agreement and Locative Inversion constructions are part of a more general and widespread pattern in Bantu languages (Baker, 2008; Carstens, 2005; Collins, 2004; Diercks, 2011; Kinyalolo, 1991) where the subject marker agrees with the element occupying the preverbal position, whether a locative, a patient (15), or an instrument (16).⁷

- (15) Ibitabo bi-á-som-ye Yohani. Kirundi (JD62)
8.books 8_{SM}-PST-read-PERF 1.John
'JOHN read the books.' (Lit. 'The books read John.') (Ndayiragije, 1999:148)
- (16) a. U-John u-dla nge-sipunu. Zulu (S42)
1a-1a.John 1a_{SM}-eat with-7.spoon
'John is eating with the spoon.' (Zeller, 2012:134)
- b. I-sipunu si-dla u-John.
7-7.spoon 7_{SM}-eat 1a-1a.John
'John is using the spoon to eat.' (Lit. 'The spoon is eating John.')

The generalization for these constructions is that agreement is independent of Case, but related to the element occupying the preverbal position. Two similar analyses have been proposed to account for these patterns in agreement.

The first suggests that the head responsible for subject agreement not only has uninterpretable ϕ features which probe for a matching goal, but also has a movement trigger (EPP feature) which is responsible for moving the agreed-with goal to the specifier of that head. This is proposed by Collins (2004:116) as the 'Agreement Parameter'.

- (17) Agreement Parameter:
Let Agree (X, YP), where X contains the probe (uninterpretable phi-features) and YP contains the goal, then X has an EPP feature that is satisfied by YP.

Carstens (2005) phrases a very similar analysis in slightly different terms and proposes the Feature-linking Parameter, which links Agree to either EPP or Case.

- (18) Feature-linking Parameter:
 $u\phi$ has EPP as a subfeature in Bantu (and Case in Indo-European languages)

⁷ These subject inversion constructions express focus on the postverbal logical subject. Inversion constructions can also expresstheticity.

the conjoint or disjoint form of the verb (see [Marten and van der Wal, 2015](#)). These properties all indicate that there is a close relation between verb and following subject in inversion constructions (23a), which is absent for right dislocation (23b).

- (23) a. P-è-yá òvá-éndà. Otjiherero
 16_{SM-PST}-come 2_C-visitor
 ‘Visitors came.’/‘There came visitors.’
- b. V-è-yá, òvâ-éndà.
 2_{SM-PST}-come 2_D-visitor
 ‘They came, the visitors.’ (Marten, 2011:801)

The Agreeing Inversion constructions are thus crucially different from right dislocation constructions. In addition, it can be shown for Matengo that the postverbal subject is in situ in the verb phrase – see [van der Wal \(2012\)](#) for arguments involving scope and phonological phrasing.

Furthermore, these languages do not have locative inversion like the Bantu languages described by Baker, Carstens and Diercks: the subject marker cannot agree with the preverbal locative, but must seek agreement with the postverbal subject.¹¹

- (24) a. Aléttó a-náá-phiyá wakisírwa. Makhuwa¹² (P31)
 2.guests 2_{SM-PRES.DJ}-arrive 16.island
 ‘The guests arrive on the island.’
- b. Wakisírwa a-náá-phiyá alétto.
 16.island 2_{SM-PRES.DJ}-arrive 2.guests
 ‘On the island arrive guests.’
- c. * Wakisírwa wa-náá-phiyá alétto.
 16.island 16_{SM-PRES.DJ}-arrive 2.guests
 int. ‘On the island arrive guests.’ (van der Wal, 2009: 194, 195)
- (25) a. Máhimba ga-a-tam-iti mu-kítengu. Matengo¹³ (N13)
 6.lions 6_{SM-PAST-live-PERF} 18-7.forest
 ‘Lions lived in the forest.’
- b. *Mu-kítengu mu-a-tam-iti máhimba.
 18-7.forest 18_{SM-PAST-live-PERF} 6.lions
 Intended: ‘In the forest lions lived.’
- c. Mu-kítengu ga-a-tam-iti máhimba.
 18-7.forest 6_{SM-PAST-live-PERF} 6.lions
 ‘In the forest lions lived.’ (Yoneda, 2011: 770)

Similarly, impersonal (passive and active) constructions do not have default agreement, but the subject marker still agrees with the subject, as illustrated for Makhuwa in (26).

¹¹ It should be pointed out that this is independent of the ability of locative DPs to trigger agreement, as shown in (iii) for Makhuwa, where the locative *mpaani mu* ‘inside’ is the subject of ‘be dirty’.

(iii) Mpáani mú n-núú-nanar-átsa.
 18.Inside 18.DEM.I 18_{SM-PERF.PERS-MESS.UP-PLUR}
 ‘inside here is all messy.’

Comparing this with (24), we have to conclude that locatives in Makhuwa can function as arguments (presumably receiving structural Case) or ‘bare DP’ adverbs (which may have inherent case).

¹² The Makhuwa data were collected during fieldwork on Ilha de Moçambique in the north of Mozambique in 2005, 2006 and 2008 as part of the NWO project ‘Word order and morphological marking in Bantu’. Examples without tone marking were subsequently elicited over the telephone.

¹³ The Matengo data come from elicitation sessions with a native speaker in London and email correspondence with other speakers unless the source literature is indicated.

- (26) (Wa-phiy-aly-ááwé owaání,) tsi-nú-mwíy-iyá
 16-arrive-PERF.REL-POSS.1 home 10SM-PERF.PERS-steal-PASS
 éthú tsootéene.
 10.things 10-all
 ‘(When she arrived home,) everything was stolen’
 (literally: ‘were stolen all things’)

And likewise, there is no default agreement for weather verbs in Matengo.

- (27) Ki-bi kipepu. Matengo
 7SM-be.PERF 7.coldness
 ‘It is cold.’ (literally: ‘coldness exists’)
- (28) Ji-kunika ihjula. (Nobuko Yoneda, p.c.)
 9SM-rain 9.rain
 ‘It is raining.’ (literally: ‘rain rains’)

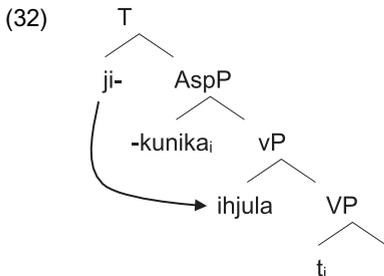
Makhuwa does show an alternative subject marker *o-* for some weather verbs (29), and also in those instances when there is no logical subject, as in the impersonal passive of an unaccusative verb (31).¹⁴ It is telling that this default agreement only surfaces in cases where there is no clear subject to determine the agreement.

- (29) oviha ‘to be hot’ a. o-náá-víha ‘it is hot’ Makhuwa
 oriirya ‘to be cold’ b. o-náá-ríirya ‘it is cold’

cf.

- (30) E-náá-rúpá epúla!
 9SM-PRES.DJ-rain 9.rain
 ‘It is raining!’
- (31) O-nuu-khw-iyá.
 ?-PERF.PERS-die-PASS
 ‘There has been/occurred a death.’

We can conclude that subject agreement in these languages with Agreeing Inversion is, first, not random, and second, not linked to an element in the preverbal position. Hence, the question is what determines agreement in these languages. If subject agreement is neither tied to Direction nor to Case, Baker’s (2008) parameters in (19) and (20) are effectively set ‘no, no’. Baker (2008) does not devote much attention to this, but in a footnote, he mentions that “Agreement in [no-no] languages is not random and unconstrained. The easiest answer would be to say that T simply probes downward in the pre-movement structure, agreeing with the first DP it finds – the thematic subject in spec,vP- regardless of how it gets case or whether it moves.” (Baker, 2008: 170). We can apply this hypothesis to Matengo, with the tree in (32) illustrating the Matengo example in (28) above (‘rains rain’).

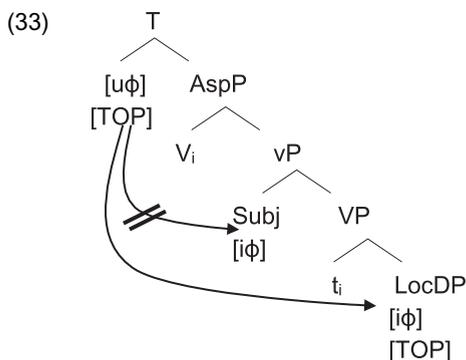


¹⁴ It is difficult to establish in what class the agreement is, because *o-* is the subject prefix for classes 1, 3, 14, 15, and 17; hence the question mark in the gloss.

The hypothesis is thus that subject agreement in Makhuwa and Matengo is always determined by the hierarchically closest goal. Whether this can account for the data depends in part on what analysis we adopt for Locative Inversion and for preverbal adverbs in general. A long-standing debate for Locative Inversion is how the locative DP can be raised over the subject. The subject is usually assumed to start off higher in the structure than the locative and therefore closer to the probing head (T or AgrS) that spells out as the subject marker. Hence, agreeing with and raising the locative while leaving the subject in situ violates the Minimal Link Condition (Chomsky, 1995, 2000; cf. Rizzi's 1990, 2001, 2013 Relativized Minimality). There are two ways around this problem.

The first approach is that the locative is in fact in a higher position than the subject when T probes. This could be the case if the locative has moved to the edge of the vP phase, or if it was generated in a projection higher than vP (e.g. Zeller (2012, 2013) proposes PrP as the position where the inverted element originates in Instrument Inversion and (semantic) Locative Inversion, and Carstens and Diercks (2013a) posit an AgrLoc head above vP that targets only locatives). Hence, under this approach, no extra features on T need to be postulated for the derivation of Locative Inversion, as the closest goal will be the locative and not the subject.

The second way to circumvent the locality problem in Locative Inversion is an analysis in which the probe and goal (AgrS and locative DP, respectively) are further specified, for example having an additional topic feature [TOP], and a full match between the two is required. That is, it is not enough for a goal to partially match the features of the probe. If our probe T is specified not just for $u\phi$, but also for topicality [TOP], then only a goal with a [TOP] feature would fully match the probe's specifications. All inversion constructions in Bantu have the function of highlighting the logical subject, either because it is newly presented (as inthetic sentences) or because it is focused (as in answers to questions and contrastive contexts). This entails that the logical subject in an inversion construction will never be specified as [TOP] and hence that it is not a fully matching suitable goal. This allows the probe T to skip the subject, continue its search and agree with the lower locative if this is specified as [TOP]. This is illustrated in (33).



In this approach, the variation between languages with Locative Inversion and Agreeing Inversion is in the specification of the probe T for [TOP]. If T has [TOP], we find agreement with whichever element is topical (as in the languages Diercks describes); if T does not have [TOP], it will agree with the first c-commanded goal. If this goal is the logical subject, then we can account for the Agreeing Inversion constructions presented in this paper. The question, however, remains whether the logical subject is always the closest c-commanded goal in these languages.

It is important to note, in this respect, that the fronting of a locative or instrumental is possible in Makhuwa and Matengo as well, as shown in (24) and (25) above. All else being equal, this proceeds via *spec,vP*, resulting in a situation where the locative (or instrumental, or . . .) can intervene between the T probe and the logical subject and the derivation of Agreeing Inversion is no longer obvious: an unrestricted downward probe will encounter the locative rather than the subject as its closest goal in a sentence like (25c), here repeated as (34), and locality predicts that the subject marker will agree with the locative (i.e. Locative Inversion), which is clearly not the case.¹⁵

- (34) Mu-kítengu ga-a-tam-iti máhimba. Matengo
 18-7.forest 6SM-PAST-live-PERF 6.lions
 'In the forest lions lived.'

¹⁵ Note that this is the predication for languages with Agreeing Inversion in the first approach as well, as in these languages T would not have a [TOP] specification anyway.

As agreement is still with the logical subject, there must be something else that uniquely identifies the logical subject as the only viable goal for subject agreement. A quite natural candidate for that unique identifier is nominative Case. This would set Baker's (2008) Case Dependency Parameter to 'yes' for the Bantu languages that have Agreeing Inversion as their only inversion construction.

In conclusion, in the languages where subject agreement is not consistently with the logical subject, there is no evidence that nominative abstract Case plays any role, and this is accounted for if [uCase] is absent in these languages. However, the Agreeing Inversion construction as found in Matengo and Makhuwa potentially provides this evidence for Case. That is, acquirers receive a potential cue, not just in subject inversion but in every sentence, that subject agreement is related to nominative Case on the logical subject. Furthermore, the suggestion that nominative Case does not play a role in the languages Diercks (2012) discusses does not preclude the possibility that Case is effective in other parts of a language, a point I briefly come back to in Sections 5 and 7.

4. Overt subject DPs in non-finite clauses

Nominative Case is traditionally associated with finiteness: nominative Case on an overt subject DP can only be licensed by finite T. Hence, the subject in a non-finite clause should either be null (PRO) or have a different licenser, such as a preposition or Exceptional Case Marking from a higher verb. Following this logic, if a language shows restrictions on overt subjects in non-finite clauses, this argues for the influence of Case licensing, whereas if overt DPs are allowed in non-finite clauses, (nominative) Case apparently does not play a role.

It is well known by now that even languages that otherwise show case marking do sometimes allow overt DPs in non-finite clauses (Landau, 2006; McFadden, 2004; Sundaresan and McFadden, 2009; Szabolcsi, 2009; Torrego, 1998), thus calling into question the direct relation between the distribution of overt DPs and Case. However, since 'finiteness' is not a unitary notion, it needs to be established on a language-individual basis precisely which aspect(s) of finiteness correlates with nominative Case. This can be ϕ agreement with the subject, (semantic) Tense or independent sentencehood (see among others Landau, 2004; Sitaridou, 2006).

Assuming for this paper, then, that restrictions in non-finite clauses are related to Case licensing, and leaving discussion of the particular aspects of finiteness for later in this section, there are three environments in which this can be tested (Diercks, 2012; Sheehan and van der Wal, Submitted):

A. complements of raising-to-subject verbs

(35) *It seems [John to eat pancakes].

B. complements of control verbs without Exceptional Case Marking or an overt complementiser;

(36) *We hope [John to eat pancakes].

C. and sentential subjects without an overt complementiser.

(37) *[John to eat pancakes] would be good.

The data for these environments are shown below for the languages Diercks (2012) discusses and contrasted with Makhuwa and Matengo, which again pattern differently.

4.1. DPs as subjects of non-finite complements of raising predicates

If Case does not play a role in the syntax of a language, Diercks argues, we would expect find overt DPs as subjects of non-finite sentences, a prediction that holds true for the languages he looks at. Like in English, the subject of a finite complement clause can be overt, as in (38a). Unlike English, however, the subject is also allowed to appear in a non-finite clause as in (38b), which lacks a Case licenser such as a complementizer or preposition.¹⁶

¹⁶ Diercks (2012) gives the same pattern for Swahili, but Kristina Riedel (p.c.) points out that in fact a preposition *kwa* is needed for the sentence to be grammatical in standard Swahili.

- (38) a. I-na-wezekana kukala Mike a-nda-muiha Tegan. Digo (E73)
 9_{SM-PRES-possible} that 1.Mike 1_{SM-FUT-call} 1.Tegan
 'It is possible that Mike will call Tegan.'
- b. I-na-wezekana Mike ku-muiha Tegan.¹⁷
 9_{SM-PRES-possible} 1.Mike 15-call 1.Tegan
 'It is possible (for) Mike to call Tegan.'
- c. Chahi i-na-wezekana mutu ku-olagb-wa kpwa sababu ya mutu mnono sana.
 maybe 9_{SM-PRES-possible} 1.person 15-kill-PASS for reason of 1.person 1.good very
 'Maybe it is possible [for] a person to be killed because of a very good person.'
 (Diercks, 2012: 260, referring to Steve Nicolle)

Unfortunately, neither Makuwa nor Matengo has clear raising-to-subject predicates. Instead, for 'seem'-type verbs Makuwa has an experiencer construction (39).

- (39) Ki-ná-móóná ntokó wiirá n-náá-kí-thépya. Makuwa
 1_{SG.SM-PRES.DJ-see} like COMP 2_{PL-PRES.DJ-1SG.OM-lie}
 'It seems like you are lying to me.' = 'I look/see as if you are lying to me.'

4.2. DP subjects in non-finite complements of control predicates

While it is perfectly grammatical in Matengo and Makuwa to have a null (PRO) subject in the complement of a control predicate, as shown in (40ab) and (41a), an overt DP subject in an infinitive complement is ungrammatical, as seen in (40c) and (41b).

- (40) a. M-bala kúla ímbuui. Matengo
 1_{SG.SM-want} 15.eat 9.goat
 'I want to eat goat.'
- b. M-bala ímbui kúula.
 1_{SG.SM-want} 9.goat 15.eat
 'I want to eat goat'/'I want goat to eat.'
 * 'I want the goat to engage in eating.'
- c. * M-bala imbui kula manyaae.
 1_{SG.SM-want} 9.goat 15.eat 6.grass
 int. 'I want (the) goat to eat grass.'
- (41) a. Ki-m-phéélá waápéya nráma. Makuwa
 1_{SG.SM-PRES.CJ-want} 15.cook 3.rice
 'I want to cook rice.'
- b. * Ki-m-phéélá Amína waápéya nráma.
 1_{SG.SM-PRES.CJ-want} 1.Amina 15.cook 3.rice
 int. 'I want Amina to cook rice.'

This shows that DPs cannot appear as subjects of non-finite complement clauses in Matengo and Makuwa. Note also that object marking on the verb in Makuwa does not seem to be related to (accusative) Case at all. There is no equivalent of ECM to "save" the subject of the infinitival clause, i.e., object marking does not ameliorate the infinitive complement, as shown in (42) below. This holds even though object marking of a local DP is otherwise permitted and even required in Makuwa, as explained in more detail below.

- (42) * Ki-ni-m-pheela Amína waapeya nrama. Makuwa
 1_{SG.SM-PRES.CJ-1OM-want} 1.Amina 15.cook 3.rice
 int. 'I want Amina to cook rice.'

¹⁷ Bantu infinitives are in noun class 15 and therefore glossed as such.

Instead, a subjunctive verb must be used in the complement clause in both languages, as seen in (43)–(45), where the absence of a preverbal TAM marker and the optative final vowel *-e* show that the verb is subjunctive. This subjunctive verb form shows subject agreement in noun class, which is one prototypical property of finiteness (Carlson, 1992; Nikolaeva, 2007, among many others). The *-tsive/a* experiential construction in (46) shows the same restrictions when followed by a non-finite complement.

- (43) a. Mbala imbúí ji-kulâ mány'ááé. Matengo
 1SG.SM-want 9.goat 9SM-eat 6.grass
 'I want a/the goat to eat grass.'
- b. Mbala imbúí ji-kul-áaje.
 1SG.SM-want 9.goat 9SM-eat-SUBJ
 'I want a/the goat to eat.' (= want goat to engage in eating)
- (44) a. N-degeme amáábú ateleka mpoonga.
 1SG.SM-expect 2.mother 2SM-cook 3.rice
 'I expect mother to cook rice.'
- b. * N-degeme amáábú kuteleka mpoonga.
 1SG.SM-expect 2.mother 15.cook 3.rice
- (45) Ki-m-phéelá Amína a-apéy-e nráma. Makhuwa
 1SG.SM-PRES.CJ-want 1.Amina 1SM-cook-SUBJ 3.rice
 'I want Amina to cook rice.'
- (46) a. O-kí-tsívélá ovára ehópa.
 ?-1SG.OM-please 15.fish 9.fish
 'I like to fish.'
- c. * O-ki-tsivela Peeturu ovara nteko.
 ?-1SG.OM-please 1.Pedro 15.grab 3.work
 int. 'I like for Pedro to work.'
- b. O-ki-tsivela wiira Peeturu a-var-e nteko.
 ?-1SG.OM-please COMP 1.Pedro 1SM-grab-SUBJ 3.work
 'I like it that Pedro works.'

The subjunctive complements raise two further questions that need to be answered before a conclusion can be drawn on the presence of Case in these control complements:

1. whether the subject is indeed in the lower clause and has not raised to become the object of the higher verb; and
2. whether the subjunctive verb in the lower clause licenses the nominative Case of the subject. If it does, these data are compatible with the presence of Case in these languages.

With respect to the first question, it needs to be shown that the DP is (Case-)licensed as the subject of the lower clause and not the object of the higher clause (ECM). In Makhuwa, this can be shown with object marking. An object marking prefix on the verb is obligatory only and always for object nouns in classes 1 and 2 (in addition to 1st and 2nd person), as shown in (47).

- (47) a. Ki-ni-m-wéha Hamisi /namarokoló / nancoólo. Makhuwa
 1SG.SM-PRES.CJ-1OM-look 1.Hamisi /1.hare / 1.fish.hook
 'I see Hamisi/ the hare / the fish hook.'
- b. * Ki-m-wéhá Hamisi / namarokoló / nancoólo.
 1SG.SM-PRES.CJ-look 1.Hamisi / 1.hare / 1.fish.hook

The fact that ‘Amina’ is not object marked in the subjunctive complement in (45) above shows that it must be the subject in the lower clause, rather than raised to the object position of the higher clause.¹⁸ If it would have undergone raising-to-object, object marking would have been obligatory. Note also that object marking is possible with a subjunctive complement, but results in the DP being the thematic object of the higher verb, not the subject of the lower. This is apparent in the informants’ explanations for (48) where it is relevant that *-pheela* means both ‘want’ and ‘like’. The interpretation of (48a) is that “it seems that you like Hare but also want him to go away; that is weird”, and (48b) was described as “you are looking for Amina so that she can come and cook”. The lower clause in these examples must have a *pro* subject.

- (48) a. * Mwi-ni-ń-phéélá namárokolo a-khum-é? Makhuwa
 2PL-PRES-1OM-want 1.hare 1SM-leave-SUBJ
 int. ‘Do you want Hare to leave?’
- b. Ki-ni-ń-phééla Amína a-w-e áá-pey-e nráma.
 1SG.SM-PRES-1OM-want 1Amina 1SM-COME-SUBJ 1SM.SUBS-COOK-SUBJ 3.rice
 ‘I want Amina, (so that) she comes and cooks rice’

This object-marked construction, then, must be structurally different from the ones in (43) and (45) above, where the overt DP is in the lower clause as the subject of the subjunctive verb.

With respect to the second question (does the lower subjunctive verb license Case?), we need to know what it is that allows a clause to contain a nominative subject DP. As mentioned, nominative Case has been associated with the finiteness of the clause. In particular, various relations have been proposed between parts of inflection and Case. The first is an association with full ϕ feature specification, where [uCase] valuation is seen as being involved in ϕ feature valuation, and the absence of Case valuation in non-finite clauses is explained by T being deficient, having incomplete ϕ features (Chomsky, 2000; Ferreira, 2004; Nunes, 2008). A second relation is with Tense, where the absence of Case valuation in non-finite clauses is due to these clauses not having morphological Tense or semantic Tense, that is, the absence of independent temporal reference (Alexiadou and Anagnostopoulou, 2002; Landau, 2004). Third, the ability of the clause to be an independent CP has been connected to nominative Case (Sitaridou, 2006). These properties are discussed in turn, in order to see whether the subjunctive clause in Makhuwa plausibly licenses Case (which I conclude it does).

First, ϕ agreement seems to be complete in the subjunctive: full person, number and noun class prefixes are expressed on the subjunctive verb form, just as in inflected main clause verbs.¹⁹

Second, the subjunctive is not specified for tense, that is, there is no formal indication of Tense in the morphology. However, it has been argued for Greek that it is not the absence of morphological tense marking that corresponds to the absence of nominative Case, but the absence of semantic tense (Alexiadou and Anagnostopoulou, 2002, referring to Varlokosta, 1994). The examples in (49) suggest that the subjunctive is compatible with temporal adverbs (independently of the main clause), and hence that the subjunctive does have semantic tense.

- (49) a. Ntsana mw-aa-pheela wiira k-aapey-e esheeni elelo?
 y’day 2SG.SM-IMPF.CJ-want COMP 1SG.SM-COOK-SUBJ 9.what today
 ‘Yesterday, what did you want me to cook today?’
- b. Mwi-nni-pheela k-uu-tumih-er-e=ni olavilavi meelo?
 2PL.SM-HAB-want 1SG.SM-2SG.OM-SELL-APPL-SUBJ=PLA 14.trick tomorrow
 ‘Do you want me to sell you a trick tomorrow?’ Makhuwa

Third, although the subjunctive verb form can occur in a subordinate clause, it can also be used in a main clause with an optative reading, hortative or imperative reading, as shown in (50) and (51).

¹⁸ A reviewer notes that this contrasts as expected with the raising-to-object data in Zulu (see Halpert and Zeller, to appear).

¹⁹ There is one morphological exception: only when the subject is a noun in class 1 does the prefix change, from *o-* in the main clause (v.a) to *a-* on the subjunctive (v.b). The *a-* prefix seems largely restricted to dependent clauses (Güldemann, 1996), but it is unknown whether this correlates with finiteness at all (and there is no one-to-one relation, as we shall see in Section 5).

- (v) a. O-náá-khúwá paáhi. Makhuwa
 1SM-PRES.DJ-bark only
 ‘He is only barking.’
- b. Oo-mánáníhá wiirá a-var-é nurímé ńne.
 1SM.PERF.DJ-try COMP 1SM-grab-SUBJ 5.frog 5.DEM.III
 ‘He tried to get that frog’ / ‘he tried that he would get that frog.’

- (50) M-vir-é. Makhuwa
 2PL.SM-pass-SUBJ
 ‘Come in!’, lit: ‘you (may) pass’
- (51) Ni-ń-kóh-e ntsíná n-áwé.
 1PL.SM-1OM-ask-SUBJ 5.name 5-POSS.1
 ‘Let’s ask for his name.’

Importantly, when the subjunctive occurs in an embedded clause, this can be introduced by a complementizer, as in (49) above and (52). These data show that the subjunctive clause is a CP.

- (52) Ki-m-phéélá wiira nhím-ááká a-som-é. Makhuwa
 1SG.SM-PRES.CJ-want COMP 1.brother-POSS.1SG 1SM-read-SUBJ
 ‘I want my brother to study.’ / ‘I want that my brother studies.’

This resonates with [Sitaridou \(2006\)](#), who suggests that nominative Case is related to independent sentencehood. That is, T is dependent on C in order to be finite and license nominative Case. This I argue to be the property linked to Case-licensing in Makhuwa as well.

In summary, a full DP subject is allowed in a subjunctive complement clause, but not in an infinitive. The various properties associated with finiteness show that subjunctive clauses in Makhuwa are “more finite than infinitival V-complements but less finite than main clauses” ([Givón, 2001:338](#)). The crucial characteristic in Makhuwa to license Case is independent sentencehood (presence of C), and I argue that the subjunctive in Makhuwa therefore does assign Case to its subject (see also the contrast with the durative ‘gerund’ in Section 6). For Matengo it remains to be seen whether the lower verb also licenses Case; an in-depth analysis of the subjunctive tenses would be needed, which must, at this point, be left for further research.

4.3. DPs in non-finite sentential subjects

The third environment in which we find non-finite clauses is when they function as the subject of a sentence. In (53), the clause ‘to win the game’ is non-finite and T can hence not license the Case of the subject within that clause, ‘Sammy’. This can be seen in the English translation, where the preposition ‘for’ is needed to license the subject DP. The fact that such a prepositional licenser is not needed in Lubukusu is an argument to say that the subject DP does not need to be Case-licensed, and shows that there is no evidence for Case in these environments.

Lubukusu (JE31c, [Diercks, 2012:261](#))

- (53) Sammy khu-khila ku-mw-inyawé o-kwo khu-la-sanga-sya mawe.
 1Sammy INF-win 3-3-game DEM-3 15SM-FUT-please-CAUS mother
 ‘For Sammy to win the game will please his mother.’

The same construction is not possible in Matengo: although an infinitive can be the subject, and a null PRO subject is grammatical (54a), an overt DP as the subject of that infinitive is not licensed. The sentence is either interpreted with the DP as a vocative (55a), or repaired by inserting a preposition *kwaka* (55b).

- (54) a. Kúula sáape. Matengo
 15.eat good
 ‘To eat is good.’
- b. * Áidan kúula sáape.
 Aidan 15.eat good
 int. ‘For Aidan to eat is good.’
- (55) a. Áidani, kúula sáape.
 Aidan 15.eat good
 ‘Aidan, eating is good!’
- b. (Ni-holalé) kwaka Áidan kúula sáape.
 (1SG.SM-think) for Aidan 15.eat good
 ‘(I think that) For Aidan to eat is good’

Although in Makhuwa in the first instance it seemed to be possible to have an overt subject in a non-finite sentential clause (56a), my informants all indicated alternatives: the use of a preposition (56b), an obligatory pause implying an analysis as a vocative (57a), or a different word order with a subjunctive verb form (57b).

- (56) a. Coána ophiyá Musampíikhí ti woórikarika. Makhuwa
 1.Joanna 15.arrive Mozambique COP difficult
 '(For) Joanna to arrive in Mozambique is difficult.'
 'Joanna arriving in Mozambique – that is difficult.'
- b. Para Coána ophiya Musampíikhi khu-khwey-ále.
 for 1.Joanna 15.arrive Mozambique NEG.15SM-be.easy-PERF
 'For Joanna to arrive in Mozambique was not easy.'
- (57) (stimulus: (for) Maria to eat rice would be good)
- a. Mariá *(,) ócá nráma w-aánaa-réera.
 1.Maria 15.eat 3.rice 15SM-IMPF-be.good
 'Maria, to eat rice would be good.'
- b. W-aaní-réera Mariya ó-c-e.²⁰
 ?SM-IMPF-be.good 1.Maria 1SM-eat-SUBJ
 'It would be good if Maria ate.'

For (56a), which seemed okay initially, one informant indicated a pause before the copula, which implies a sort of paratactic structure as indicated in the second translation. These so-called root infinitives are problematic in any theory of Case. *Progovac (2006)* deals with these 'Mad Magazine sentences' (*Akmajian, 1984*) as small clauses where there is neither tense in the clause, nor Case on the subject – there is just a predication relation.

Makhuwa has yet another non-finite strategy, where the infinitive behaves like a noun²¹ and its subject appears with a possessive, that is, it can be said to have genitive Case (58).²²

- (58) O-cáwá w-áwé Folóra o-kí-tsívéla. Makhuwa
 15-run 15-POSS.1 1.Flora ?-1SG-please
 'Flora's (way of) running I like.'

In summary, the data from sentential subjects in Matengo and Makhuwa show that overt DPs cannot surface as subjects in these non-finite clauses, unlike in the languages that *Diercks (2012)* studies. This shows that there are restrictions on the occurrence of overt DPs, which must be accounted for. Since these properties are traditionally associated with Case, this is taken as yet another indication for the presence of an abstract Case-licensing mechanism in these languages. Moreover, this is something that learners can pick up. Never receiving input for overt subjects in non-finite clauses provides relatively strong evidence for a restriction on the occurrence of DPs, i.e. for an abstract licensing system to be present. Finally, it also demonstrates that the proposed Case parameter does indeed not have the same setting in all of the Bantu languages.

5. Licensing the agent in a passive sentence

In this section an additional test involving the passive is introduced, which is not used by *Diercks (2012)*. In a language without Case, we expect DPs to be allowed to appear without explicit Case licensers, such as prepositions. This should also hold for the agent DP in a typical passive, where the agent is demoted from the syntactic subject function. The agent is still part of the thematic structure, but it is not Case-licensed by the verb and hence needs a preposition ('by' in English) to appear overtly. A language like Luganda, that otherwise does not show Case properties either (*Sheehan and van der*

²⁰ The tense prefix *-aani-* is a regional variant of *-aana-*. See Footnote 11 for the question mark as gloss for subject agreement.

²¹ This is a general fact about infinitives in Bantu languages, which formally belong to noun class 15 and can hence be seen as true nouns.

²² Alternatively, the subject can appear with the connective, which functions like a preposition 'of'.

- i. O-cáwá w-a Folóra ti w-oóréera.
 15-run 15-CONN 1.Flora COP 15-good
 'Flora's running is good.'

Wal, Submitted), allows for the overt expression of the agent without any preposition or case-licensing linker, as predicted by Diercks' (2012) setting for 'no [uCase]' in Bantu (cf. Pak, 2008).

- (59) a. Abaana ba-a-soma ekitabo. Luganda
 2.children 2SM-PST-read 7.book
 'The children read a book.'
- b. Ekitabo ky-aa-som-ebwa abaana.
 7.book 7SM-PST-read-PASS 2.children
 'The book was read (by) the children.'

In Makhuwa, on the other hand, a preposition *ni* is required, shown in (60).

- (60) íi, koo-vár-íya *(ni) khwátte! Makhuwa
 ii 1SG.SM.PERF.DJ-grab-PASS by 1.fox
 'I, I am caught by the fox!'

This preposition functions as a Case-licenser rather than an introducer of an extra argument: the agent remains present in the theta-structure of the verb (i.e. is demoted rather than removed), as evidenced by the felicity of agent-oriented adverbs and purpose clauses, as in (61).

- (61) a. Mwalakhu oo-hit-iyá mwayini. Makhuwa
 1.chicken 1SM.PERF.DJ-cut-PASS on.purpose
 'The chicken was killed intentionally.'
- b. Mwalakhu oo-hit-iyá para (hiyaano) o-n-khuura meelo.
 1.chicken 1SM-cut-PASS for 1PL.PRO 15-1OM-eat tomorrow
 'The chicken was killed (for us) to eat (it) tomorrow.'

Matengo does not have a typical Bantu morphological passive construction. Instead, there are three alternative strategies (van der Wal, in press). A first strategy is a subject inversion construction, where the agent DP is pragmatically demoted to non-topic but still functions as the syntactic subject, also triggering subject marking on the verb, as in (62a). The second alternative is a 3rd plural strategy where subject agreement is in class 2 and the interpretation is impersonal (62b). A third alternative strategy is a stative extension on the verb, which varies between an 'ability' reading and a passive reading (62c). In the latter strategy the agent DP can only be expressed if it is non-volitional (like 'the wind') and if it is preceded by a preposition *na*.

- (62) a. ('What about Anna?') Matengo
 Ju-lap-ui Jóoni.
 1SM-hit-PERF 1.John
 'John hit (her).'/ 'She was hit by John.'
- b. A-télik-i cháai.
 2SM-COOK-PERF 7.tea
 'Tea was made.' lit. 'They cooked tea.'
- c. Lindilíisá li-hogul-ik-í *(n) ũwáai.
 5.window 5SM-open-STAT-PFV by 14.wind
 'The window was opened by the wind.'

For our assessment of how abstract Case can be detected, this entails that in Makhuwa there is yet another environment (passive) that evidences the influence of Case, by requiring a preposition for DP licensing. In Matengo, this environment seems at first sight to be lacking, but the use of the preposition in the stative is also an indication of Case licensing, and the use of the consistently agreeing subject inversion strategy as discussed in section 3 also provides evidence for the presence of Case, both for the linguist and for the language acquirer.

A remaining puzzle is the existence of languages that conform to Diercks' (2012) predictions for Caselessness on other diagnostics, but nevertheless have a passive with a by-phrase. An example is Diercks' otherwise Caseless language Lubukusu (63), where the preposition *nende* is required with the overt agent of a passive clause.

- (63) Ba-sasi ba-bol-el-wa nende Sammy mbo Lubukusu (JE31c)
 2-parents 2_{SM}-say-APPL-PASS by 1.Sammy that
 ba-keni ba-a-rekukha.
 2-guests 2_{SM}-PAST-leave
 'The parents were told by Sammy that the guests left.' (Diercks, 2012:296)

This can be interpreted in two ways: either the preposition does not just Case-license the agent, but actually introduces it; or there is Case in one part of the language, as Halpert (2012b, 2013) also claims for Zulu (which otherwise patterns as a Caseless language. Evidence for Case in one area of the language may or may not be enough input to posit an abstract Case licensing system. It also suggests that a nominal licensing requirement is not set as a macroparameter but rather a microparameter that can be active only in a subpart of the language. This requires further language-individual testing.

6. DPs in multiple Case positions

A final diagnostic used by Diercks (2012) is that Caseless languages should allow DPs to move out of Case positions and to more than one Case position. This is because of the presumed activity that is associated with [uCase]. In the standard Chomskyan probe-goal Agree system, an uninterpretable feature makes a goal active, and the goal is required to be active to be visible for the probe. This is known as the Activity Requirement. The relevant feature that makes a DP active and hence renders it suitable as a goal for agreement and movement, is assumed to be [uCase], at least for Indo-European languages (Chomsky, 2000).

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

Under standard assumptions, an uninterpretable feature is deactivated as soon as it is valued (by Agree). This entails that if a language has Case, and if a DP agrees and/or A-moves, its [uCase] feature is valued and the DP rendered inactive. This in turn means that DPs with valued Case are not available for further movement and agreement. Moreover, it means that DP movement chains are supposed to only have one structural Case, that is, DPs cannot move through/to multiple Case positions. This is intended to account for the grammaticality of the raising construction in (65): [uCase] of the DP 'John' is valued in the finite lower clause (a) and can therefore not raise to be the subject of the higher clause (b).

- (65) a. It seems [that John is happy].
 b. *John_i seems [that t_i is happy].

However, this is not the pattern found in some Bantu languages where DPs can be 'hyperactive': they can be agreed with several times (Carstens, 2011; Kinyalolo, 1991). Thus, DPs agree with multiple verbs in complex tenses consisting of two verbs, as in (66), and in 'hyperraising' constructions (Ura, 1994) illustrated in (67).

- (66) Nzogu z̄í-kili z̄-á-twaga maswá. Kilega (D25)
 10.elephant 10_{SM}-be.still 10_{SM}-ASP-stampede 6.farm
 'The elephants are still stampeding over the farms.' (Carstens, 2011:722)

- (67) Efula ȳi-bonekhana i-na-kwa muchiri. Lusaamia (JE34)
 9.rain 9_{SM}-appear 9_{SM}-FUT-fall tomorrow
 'It seems that it will rain tomorrow' (Carstens and Diercks, 2013b)

Apparently, after the first operation of Agree on the lower verb, which should value [uCase] and render it inactive, the DPs in these constructions are still eligible for further operations and appear in multiple Case positions. This suggests that DP chains are not limited to one Case feature, or alternatively, as Diercks (2012) argues, can be accounted for more elegantly by assuming the absence of Case (cf. Baker, 2008). In addition, hyperagreement argues against the role of Case as an activity feature. In the following, two lines of argumentation are discussed that have been proposed to account for these facts, the first addressing the role of [uCase] as an activity feature, and the second examining the role of finiteness in Case valuing.

If the Activity Condition holds, and if [uCase] is indeed inactive after valuation or indeed if there is no Case at all, there must be some other uninterpretable unvalued feature that makes DPs active in these languages.²³ Carstens (2005, 2011) proposes that [Gender] is the relevant activity feature in Bantu. She argues that [Gender] functions as an uninterpretable but valued activity feature on the subject DP. If agreement is concerned with valuing a feature, and if [uGender] already has a value but remains uninterpretable hence active, any DP with [Gender] will remain active as a goal, allowing it to enter into more than one Agree relation. This suggestion is implemented by Diercks (2012) and Carstens and Diercks (2013a,b), claiming that this makes [uCase] superfluous in the languages they discuss. A weaker thesis can be formulated that Case does not play a role but is present (as Carstens, 2005 still assumes), but if [Gender] takes over the role that [uCase] plays in Minimalist analyses of other languages, then the stronger thesis should be that Case is effectively absent in these languages. I refer the reader to the cited works for a full explanation of how [Gender] can be an activity feature, and will here only concentrate on its effects for the parameterization of Case.

In the tests discussed in the previous sections, languages with Agreeing Inversion showed properties different from the languages Diercks (2012) bases his analysis on. Perhaps surprisingly, hyperagreement is attested in Bantu languages with Agreeing Inversion as well. Multiple verbs displaying subject agreement can appear in sentences with complex tenses, as illustrated in (68)–(70).²⁴

- (68) Vánó ki-háaná ki-thel-áka. Makhuwa
 PTCL 1SG.SM-have 1SG.SM-marry-DUR
 ‘Now I have to marry.’
- (69) Nguúwo jiwélé ji-ni-nyáúuka. Makwe
 10.clothes 10SM.be.PAST.PERF 10SM.PRES.PERF.be:dirty
 ‘The clothes were getting dirty.’ (Devos, 2004: 282)
- (70) Tw-a-ba tu-gon-ile. Matengo
 1PL.SM-PST-be 1PL.SM-sleep-PERF
 ‘We were sleeping, (when he arrived).’ (Yoneda, 2000: 200)

This is unexpected, because if these languages have Case (suggested by the previous tests), the [uCase] feature on the DP should be deactivated in the first instance of Agree and could hence not be a goal for further Agree relations. The same solution as proposed for Swahili hyperactivity (Carstens, 2011) can also be applied here: multiple agreement can be accounted for by assuming [uGender] as the activity feature. But even if [Gender] is an activity feature, which would be natural for a Bantu language showing [Gender] as pairs of noun classes, this does not form a clear argument *against* the presence of Case: after all, nothing restricts a language from having uninterpretable valued [uGender] as well as uninterpretable [uCase], even if this might seem somewhat uneconomical from a theoretical perspective.

Before resorting to such doubling of activity features, however, we need to have a close look at the actual instances of complex tenses in order to see whether the verbs involved are all potential Case licensers and the DP really occupies multiple Case positions. If it can be shown that only one Agree relation involves Case licensing, these examples with multiple agreement are not an argument for the absence of Case. This is the situation found in some languages which clearly do have Case. Baker (2008:210) notes that Indo-European languages can also have double agreement, but this “only happens when the lower verb is an adjective-like participle, which agrees with the subject in number and gender but not in person”. “Participial heads do not value the case of the DP that they agree with. Thus they do not compete with the finite T associated with the auxiliary verb in this respect, so nothing prevents that T from both assigning case to and agreeing with the NP” (Baker, 2008:210). As mentioned in section 4, the lower verb’s inability to license Case has been connected to three properties: incomplete ϕ features, the absence of Tense, and independent sentencehood, all related to finiteness.

These properties were discussed for the subjunctive in section 4, and are here discussed for the Makhuwa ‘have to’ construction, as given in (68). This construction consists of a higher verb *-haana* ‘have’ and a lower verb in the durative

²³ Alternatively it can be argued that the Activity Condition does not apply, either for Bantu or in general (see Nevins, 2004; Bošković, 2007), or that a DP can have multiple structural Cases (Bejar and Massam, 1999; Richards, 2013; Pesetsky, 2014), while still excluding inherent-structural case combinations like Icelandic (Jónsson, 1996; Sigurðsson, 1989, 1992; Bošković, 2007) and ‘case stacking’, this not being a reflex of multiple structural Case on the same DP (Schütze, 2001, on Korean). I will leave these analyses to one side here.

²⁴ As mentioned before, Makhuwa and Matengo do not have evident raising verbs, so hyperraising is not encountered either.

situative tense, ending in *-aka*. The question is hence whether the durative verb form is “finite enough” to license nominative Case. It turns out that the durative does not show all signs of finiteness, thus not being comparable to the cases Carstens (2011) discusses. After reviewing the various properties in the next paragraphs, I will conclude that Makhuwa shows no movement to or from multiple Case positions.

With respect to ϕ completeness, Ferreira (2004), Martins and Nunes (2006) and Nunes (2008) argue that the lower verb in Brazilian Portuguese hyperraising is ϕ incomplete and thus does not license Case. In Makhuwa and Matengo, subject agreement on the lower verb is possible in all persons and noun classes, as seen in (68)–(70) above.²⁵

The second property is the absence/presence of Tense, which Iatridou (1993) and Alexiadou and Anagnostopoulou (2002) say is involved in Greek hyperraising. If nominative Case licensing is related to Tense, then a Tense-less clause cannot license a subject. This is true for the durative situative verb form when used outside the ‘have to’ construction, i.e. as an adverbial clause as in (71). Here, the durative does not have independent time reference, but encodes the relative temporal relation with respect to the time of the event in the main clause (Noonan, 2007). For the durative, this means that the situation holds simultaneously with the main clause event, whether that is in the present/future (71a) or the past (71b). Hence, the durative expresses aspect, but not tense.

- (71) a. Ki-ná-wúú-théla ntsúwá ni-khum-áká omakhúwáni.
 1SG.SM-PRES.DJ-2SG.OM-marry 5.sun 5SM-exit-DUR 17.coast
 ‘I’ll marry you when the sun sets in the east.’
- b. Oo-vírá a-purúléy-aka tsiítsáale.
 1SM.PERF.DJ-pass 1SM-crawl-DUR like.that
 ‘He passed crawling like that.’

Makhuwa

Furthermore, there is no evidence for a separate semantic tense: in (72a) the adverb can only refer to the combined ‘have to marry’, as seen in the ungrammaticality of separate adverbs in (72b).

- (72) a. Ki-haana ki-thel-aka elelo.
 1SG.SM-have 1SG.SM-marry-DUR today
 ‘I have to marry today.’
- b. * Ntsana k-aa-haana ki-thel-aka elelo.
 yesterday 1SG.SM-PAST-have 1SG.SM-marry-DUR today
 ‘Yesterday I had to marry today.’

Makhuwa

The third characteristic is the capacity for independent sentencehood. Crucially, the situative tenses are always dependent, functioning like a converb (Carlson, 1992; Haspelmath and König, 1995; van der Wal, 2014). That is, the durative can only appear in a subordinate clause and is comparable to a gerund: the main clause ‘he crawled’ cannot be omitted in (73).

- (73) O-h-iípúrúla o-h-iípúrúlá a-pheél-ák’ ocáwa.
 1SM-PERF.DJ-crawl 1SM-PERF.DJ-crawl 1SM.SIT-want-DUR 15.flee
 ‘He crawled and crawled, wanting to flee.’

Makhuwa

Furthermore, the durative clause is never introduced by a complementizer. These are essential differences between the subjunctive (discussed in section 4.1) and the durative situative. Although they behave the same for ϕ features, the subjunctive provides evidence of being an independent CP and allowing temporal adverbs, whereas the durative in the ‘have to’ construction does not.

For this particular construction of *-haana* with a durative, it appears that the lower verb does not license Case and hence that the Case of the DP is only valued once, by the finite auxiliary *-haana*. This could be captured in the same way that participles in European languages are analyzed (Kayne, 1989), or in Henderson’s (2006) analysis of hyperagreement in Bantu, where he proposes that there is only one Agree relation (with the highest verb) and the ‘multiple agreement’ is actually concord on the lower verb with the highest verb.

²⁵ Martins and Nunes (2006) connect the possibility of hyperraising to the severely impoverished agreement paradigm in Brazilian Portuguese. They state explicitly that “we should not expect to find any instances of hyper-raising in a morphologically rich language”, which holds true for European Portuguese, but not for various Bantu languages.

I conclude that Makhuwa is not likely to have true hyperagreement.^{26,27} For the other languages with Agreeing Inversion (such as Matengo, Makwe, Matuumbi) it remains to be investigated “how finite” the lower verb is. If there is true multiple agreement, this would suggest that Case cannot be the (only) feature that makes DPs active goals.

In summary, multiple agreement is also a unidirectional diagnostic: if a language prohibits the movement of DPs from a Case position (as in English), this argues for the presence of Case. If, on the other hand, the language allows hyperagreement, this can be explained in a number of ways, which do not necessarily inform us about the status of [uCase]. Alternative explanations are: the Activity Requirement could be argued not to hold here, or not to exist at all (Bošković, 2007; Nevins, 2004); Case could be relevant for licensing but not for activation; hyperagreement does not involve multiple Case positions or agreement/valuation operations; and/or there could be a second or alternative activity feature that does not get deactivated, such as [uGender].

7. Conclusion

Even though Case may be parameterized, as Diercks (2012) proposes, microvariation within the Bantu language family shows that it is not correct to characterize the whole language family in terms of a parameter setting “no [uCase]”. Diercks (2012:283) rightly asks in his conclusion “what explanatory value does Case theory have for Bantu languages?”. The available data in Matengo and Makhuwa show that abstract Case in these languages can explain

1. the consistent agreement with the logical and grammatical subject, irrespective of its position in the sentence,
2. the absence of Locative Inversion and Default Agreement Inversion,
3. the default agreement in cases where there is no nominative DP,
4. the ungrammaticality of overt DPs in non-finite clauses, and
5. the need for a marker to introduce the overt agent DP in a passive.

More importantly, these restrictions on the agreement with and appearance of overt DPs constitute consistent evidence for the presence of abstract Case in various linguistic environments. This is plausibly enough concrete substantiation for a language acquirer to pick up on an abstract DP licensing system, which makes it learnable in Matengo and Makhuwa, but not so in languages like Luganda and the Bantu languages that Diercks (2012) examined. One of the questions is what forms enough evidence to postulate formal or uninterpretable features. As an example of an easy case, in all Bantu languages, features such as noun class (gender) are so abundant in the input that it is virtually impossible for a language acquirer to *not* pick up this formal feature. On the contrary, DP licensing (i.e. a Case feature) is much less prominent - especially when compared to languages that do have systematic morphological case marking. Nevertheless, we can clearly observe a difference in terms of input between on the one hand the languages that Diercks' (2012) discusses and on the other hand Makhuwa and Matengo: in the five environments identified, Makhuwa and Matengo arguably provide the learner with more and consistent evidence for an abstract DP licensing system than the other languages.

A further question is whether Case is always a macroparameter. There are two alternatives to the macroparametric view. One is that abstract Case does not exist at all, hence that there is no parameter. McFadden (2004) and Sundaresan and McFadden (2009) propose that the restrictions in occurrence of overt DPs can and should be accounted for through selectional restrictions on clausal complements, where independent complements take overt subjects (+R) and temporally and referentially anaphoric clausal complements select for covert subjects (-R, PRO). Note, however, that the selection analysis does not account for the consistent subject agreement in Agreeing Inversion languages, or for the restrictions in non-finite clausal subjects.

²⁶ It would be interesting to apply the same diagnostics to Diercks' Caseless languages, i.e. check independent temporal reference for instances of hyperagreement.

²⁷ Apart from the ‘have to’ construction, Makhuwa does not show many other instances of what could be multiple agreement. One is sentences with ‘be’ followed by a verbal-looking form as in (vi.b), but they also turn out not to be what they seem: the tonal pattern on the second “verb” in (vi.b), to be compared to the real inflected verb in (vi.a), shows that this is actually a connective *tsa* plus infinitive *oveliya*, functioning like an adjective.

- | | | | | |
|------|----|------------|---|---------|
| (vi) | a. | Ekokhóla | tsoo-vél-íya. | Makhuwa |
| | | 10.rubbish | 10 _{SM.PERF.DJ} -sweep-PASS | |
| | | | ‘The rubbish was swept.’ | |
| | b. | Ekokhóla | ts-aá-rí ts’ oó-vél-íya. | |
| | | 10.rubbish | 10 _{SM-PAST-be} 10 _{CONN} 15-sweep-PASS | |
| | | | ‘The rubbish was swept.’ (lit. was of having been swept) | |

A second view is held by researchers like Wiltschko (2011) and Danon (2006), who also assume that the Case Filter does not hold, but crucially propose that this may be parameterized within a language, on a microparametric level. That is, some nouns need Case licensing whereas others do not, e.g. DPs need Case and NPs not. The NP/DP distinction for Case has been proposed for Bantu languages by Ndayiragije (1999) and Baker (2003). There is another way in which Case may be microparameterized, namely with respect to which clausal heads license Case. It has been proposed that even if T may not be associated with Case, the v-domain could still be. Halpert (2012b, 2013) claims that a Licensing projection just above vP licenses Case in Zulu, accounting for subject-to-object raising and the distribution of augmentless nouns. Carstens and Mletshe (2015) propose for Xhosa that if v is defective, so is T. Case in their analysis is assigned by a FocP, explaining the obligatorily narrow focus interpretation of S in VSO order. Both proposals amount to having Case in the lower part of the clause (accusative?) but not the higher (nominative), i.e. not a macro- but a microparameter.

There are obviously many open questions regarding the licensing of overt DPs and the parameterization of Case. However, if Case is indeed a formal feature that is active in the syntax, then there are under Minimalist assumptions (at least) two expectations. First, languages are predicted to be parameterized in whether and to what extent languages employ this feature, forming parametric hierarchies as proposed by Roberts and Holmberg (2010). Second, if UG is truly minimal in its initial state, we expect features to not be given but emergent, (Bazalgette, forthcoming; Biberauer, 2014; Biberauer and Roberts, forthcoming; Gianollo et al., 2008; Wiltschko, 2014) implying that the input should be rich and unambiguous enough for the acquirer to identify the necessity to postulate a formal feature (Evers and van Kampen, 2008; Fasanella, 2014); see also Fasanella and Fortuny (2013) for a link between learnability and morphosyntactic variation. Without case morphology and in the absence of a clear interpretable counterpart to uCase, the evidence for abstract Case is to be found in the syntactic diagnostics discussed in this paper (cf. Sheehan and van der Wal, Submitted).

References

- Akmajian, A., 1984. Sentence types and the form-function fit. *Nat. Lang. Linguist. Theory* 2, 1–23.
- Alexiadou, A., Anagnostopoulou, E., 2002. Raising without infinitives and the nature of agreement. In: Alexiadou, A., Anagnostopoulou, E., Barbiers, S., Gaertner, H.-M. (Eds.), *Dimensions of Movement*. John Benjamins, Amsterdam, pp. 17–31.
- Asiimwe, A., 2014. *Definiteness and specificity in Runyankore-Rukiga*. Faculty of Arts and Social Sciences. Stellenbosch University.
- Baker, M.C., 2003. Agreement, dislocation, and partial configurationality. In: Carnie, A., Harley, H., Willie, M. (Eds.), *Formal Approaches to Function in Grammar*. John Benjamins, Amsterdam, pp. 107–132.
- Baker, M., 2008. *The Syntax of Agreement and Concord*. Cambridge University Press, Cambridge.
- Bazalgette, T., Forthcoming. Algorithmic acquisition of focus parameters. University of Cambridge.
- Bejar, S., Massam, D., 1999. Multiple case checking. *Syntax* 2, 65–79.
- Belletti, A., 1988. The case of unaccusatives. *Linguist. Inquiry* 19, 1–34.
- Biberauer, T., 2014. The universal component of emergent categories. In: LAGB Annual Meeting, The Queen's College, Oxford.
- Biberauer, T., Roberts, I., forthcoming. Parameter setting. In: Ledgeway, A., Roberts, I. (Eds.), *The Cambridge Handbook of Historical Syntax*. Cambridge University Press, Cambridge.
- Blanchon, J.A., 1998. Semantic/pragmatic conditions on the tonology of the Kongo noun phrase: a diachronic analysis. In: Hyman, L., Kisseberth, C. (Eds.), *Theoretical Aspects of Bantu Tone*. CSLI, Stanford, CA, pp. 37–82.
- Blanchon, J.A., 1999. 'Tone cases' in Bantu Group B.40. In: Blanchon, J.A., Creissels, D. (Eds.), *Issues in Bantu Tonology*. Rüdiger Köppe Verlag, Cologne, pp. 37–82.
- Bošković, Ž., 2007. On the locality and motivation of Move and Agree: an even more minimal theory. *Linguist. Inquiry* 38, 589–644.
- Bresnan, J., 1991. Locative case vs. locative gender. In: *Proceedings of the Seventeenth Annual Meeting of the Berkeley Linguistics Society: General Session and Parasession on The Grammar of Event Structure*, pp. 53–68.
- Bresnan, J., Kanerva, J.M., 1989. Chichewa locative inversion: a case study of factorization in grammar. *Linguist. Inquiry* 20, 1–50.
- Buell, L.C., 2007. Semantic and formal locatives: implications for the Bantu locative inversion typology. In: Kula, N.C., Marten, L. (Eds.), *SOAS Working Papers in Linguistics 15: Bantu in Bloomsbury*, pp. 105–120.
- Carlson, R., 1992. Narrative, subjunctive, and finiteness. *J. Afr. Lang. Linguist.* 13, 59–85.
- Carstens, V., 1997. Empty nouns in Bantu locatives. *Linguist. Rev.* 14, 361–410.
- Carstens, V., 2005. Agree and EPP in Bantu. *Nat. Lang. Linguist. Theory* 23, 219–279.
- Carstens, V., 2011. Hyperactivity and hyperagreement in Bantu. *Lingua* 121, 721–741.
- Carstens, V., Diercks, M., 2013a. Agreeing how? implications for theories of agreement and locality. *Linguist. Inquiry* 44, 179–237.
- Carstens, V., Diercks, M., 2013b. Parameterizing case and activity: hyperraising in Bantu. In: Kan, S., Moore-Cantwell, C., Staubs, R. (Eds.), *Proceedings of the 40th Annual Meeting of the North East Linguistic Society*. University of Massachusetts Graduate Linguistic Student Association, Amherst, pp. 99–118.
- Carstens, V., Mletshe, L., 2013. N-words in disguise: a negative concord approach to augmentless NPs in Xhosa and Zulu.
- Carstens, V., Mletshe, L., 2015. Implications of Xhosa expletive constructions. *Linguist. Inquiry* 46, 187–242.
- Chomsky, N., 1981. *Lectures on Government and Binding*.
- Chomsky, N., 1995. *The Minimalist Program*.
- Chomsky, N., 2000. Minimalist inquiries: the framework. In: Martin, R., Michaels, D., Uriagereka, J. (Eds.), *Step by Step: Essays on Minimalist Syntax in Honor of Howard Lasnik*. MIT Press, Cambridge, MA, pp. 89–155.
- Collins, C., 2004. The agreement parameter. In: Breitbarth, A., Riemsdijk, H.V. (Eds.), *Triggers*. Mouton de Gruyter, Berlin, pp. 115–136.
- Creissels, D., 2011. Tswana locatives and their status in the inversion construction. *Afr. Linguist.* XVII, 33–52.

- Danon, G., 2006. Caseless nominals and the projection of DP. *Nat. Lang. Linguist. Theory* 24, 977–1008.
- De Blois, K., 1970. The augment in the Bantu languages. *Afr. Linguist.* 4, 85–165.
- Devos, M., 2004. *A Grammar of Makwe*. University of Leiden.
- Diercks, M., 2011. The morphosyntax of Lubukusu locative inversion and the parameterization of Agree. *Lingua* 121, 702–720.
- Diercks, M., 2012. Parameterizing case: evidence from Bantu. *Syntax* 15, 253–286.
- Evers, A., van Kampen, J., 2008. Parameter setting and input reduction. In: Biberauer, T. (Ed.), *The Limits of Syntactic Variation*. John Benjamins, Amsterdam, pp. 483–515.
- Fasanella, A., 2014. On how learning mechanisms shape natural languages. Universitat Autònoma de Barcelona.
- Fasanella, A., Fortuny, J., 2013. Deriving linguistic variation from learnability conditions: the chunking procedure. Centre de Lingüística Teòrica. Universitat Autònoma de Barcelona.
- Ferreira, M., 2004. Hyper-raising and null subjects in Brazilian Portuguese. In: MIT Working Papers in Linguistics 47: Collected papers on Romance syntax, pp. 57–85.
- Gianollo, C., Guardiano, C., Longobardi, G., 2008. Three fundamental issues in parametric linguistics. In: Biberauer, T. (Ed.), *The Limits of Syntactic Variation*. John Benjamins, Amsterdam, pp. 109–142.
- Givón, T., 2001. *Syntax*. John Benjamins, Amsterdam.
- Güldemann, T., 1996. *Verbalmorphologie und Nebenprädikation im Bantu*. Universitätsverlag Dr. N. Brockmeyer, Bochum.
- Guthrie, M., 1948. *The Classification of the Bantu Languages*. Oxford University Press, London.
- Halpert, C., 2012a. Argument Licensing and Agreement in Zulu, Department of Linguistics and Philosophy. MIT, Cambridge, MA.
- Halpert, C., 2012b. Case, agreement, EPP and information structure: a quadruple dissociation in Zulu. In: Choi, J., Hogue, E.A., Punske, J., Tat, D., Schertz, J., Trueman, A. (Eds.), *WCCFL 29. Cascadilla Proceedings Project*.
- Halpert, C., 2013. Structural case and the nature of vP in Zulu. In: Sloggett, S., Keine, S. (Eds.), *42nd Meeting of the North East Linguistic Society. (NELS 42)*.
- Halpert, C., Zeller, J., to appear. Right-dislocation and raising-to-object in Zulu. *Linguist. Rev.*
- Harford Perez, C., 1985. *Aspects of Complementation in Three Bantu Languages*. University of Wisconsin-Madison, Madison, WI.
- Haspelmath, M., König, E., 1995. Converbs in cross-linguistic perspective: structure and meaning of adverbial verb forms – adverbial participles. In: Gerunds, *Empirical approaches to language typology* Mouton de Gruyter, Berlin.
- Henderson, B., 2006. Multiple agreement, concord and case checking in Bantu. In: Arasanyin, O.F., Pemberton, M.A. (Eds.), *Selected Proceedings of the 36th Annual Conference on African Linguistics, Cascadilla Proceedings Project, Somerville, MA*, pp. 60–65.
- Hyman, L.M., Katamba, F.X., 1993. The augment in Luganda: syntax or pragmatics? In: Mchombo, S. (Ed.), *Theoretical Aspects of Bantu Grammar. CSLI, Stanford*, pp. 209–256.
- Iatridou, S., 1993. On nominative case assignment and a few related things. *MIT Working Papers in Linguistics* 19, 175–196.
- Jónsson, J.G., 1996. *Clausal Architecture and Case in Icelandic*. University of Massachusetts, Amherst.
- Kavari, J.U., Marten, L., van der Wal, J., 2012. Tone cases in Ojibherero: head-complement relations, linear order, and information structure. *Afr. Linguist.* XVIII, 315–353.
- Kayne, R., 1989. Facets of Romance past participle agreement. In: *Dialect Variation and the Theory of Grammar*, pp. 85–103.
- Kinyalolo, K.K.W., 1991. Syntactic dependencies and the Spec-head agreement hypothesis in Kilega.
- König, C., 2008. *Case in Africa*. Oxford University Press, Oxford.
- Landau, I., 2004. The scale of finiteness and the calculus of control. *Nat. Lang. Linguist. Theory* 22, 811–877.
- Landau, I., 2006. Severing the distribution of PRO from Case. *Syntax* 9, 153–170.
- Legate, J.A., 2008. Morphological case and abstract Case. *Linguist. Inquiry* 39, 55–101.
- Maho, J., 2009. NUGL online: the online version of the New Updated Guthrie List, a referential classification of the Bantu languages.
- Marten, L., 2006. Locative inversion in Herero: more on morphosyntactic variation in Bantu. *ZAS Papers Linguist.* 43, 97–122.
- Marten, L., 2011. Information structure and agreement: Subjects and subject markers in Swahili and Herero. *Lingua* 121, 787–804.
- Marten, L., van der Wal, J., 2015. A typology of Bantu inversion constructions. *Linguist. Variat.* 14, 318–368.
- Martins, A.M., Nunes, J., 2006. Raising issues in Brazilian and European Portuguese. *J. Port. Linguist.* 4, 53–77.
- McFadden, T., 2004. *The position of morphological case in the derivation: a study on the syntax-morphology interface*. University of Pennsylvania, Philadelphia.
- Moravcsik, E.A., 1978. On the distribution of ergative accusative patterns. *Lingua* 45, 233–279.
- Morimoto, Y., 2006. Agreement properties and word order in comparative Bantu. *ZAS Papers Linguist.* 43, 161–188.
- Ndayiragije, J., 1999. Checking economy. *Linguist. Inquiry* 30, 399–444.
- Nevins, A., 2004. Derivations without the activity condition. In: McGinnis, M., Richards, N. (Eds.), *Perspectives on Phases*, MIT Working Papers in Linguistics, 49. pp. 287–310.
- Nichols, J., 1986. Head-marking and dependent-marking grammar. *Language* 62, 56–119.
- Nichols, J., 1992. *Linguistic Diversity in Space and Time*. University of Chicago Press, Chicago.
- Nikolaeva, I., 2007. *Finiteness*. Oxford University Press, Oxford.
- Noonan, M., 2007. Complementation. In: Shopen, T. (Ed.), *Language Typology and Syntactic Description, vol. II: Complex Constructions*. Cambridge University Press, Cambridge, pp. 52–150.
- Nunes, J., 2008. Inherent Case as a licensing condition for A-movement: the case of hyper-raising constructions in Brazilian Portuguese. *J. Port. Linguist.* 7, 83–108.
- Pak, M., 2008. A-movement and intervention effects in Luganda. In: Abner, N., Bishop, J. (Eds.), *The Proceedings of the West Coast Conference on Formal Linguistics. Cascadilla Proceedings Project, Somerville, MA*, pp. 361–369.
- Pesetsky, D., Torrego, E., 2001. T-to-C movement: causes and consequences. In: Kenstowicz, M. (Ed.), *Ken Hale: a life in language*. MIT Press, Cambridge, MA, pp. 355–426.
- Progovac, L., 1993. Non-augmented NPs in Kinande as Negative Polarity Items. In: Mchombo, S. (Ed.), *Theoretical Aspects of Bantu Grammar. CSLI Publications, Stanford, CA*, pp. 257–270.

- Progovac, L., 2006. The syntax of nonsententials: small clauses and phrases at the root. In: Progovac, L., Paesani, K., Casielles, E., Barton, E. (Eds.), *The Syntax of Nonsententials: Multidisciplinary Perspectives*. John Benjamins, Amsterdam, pp. 33–71.
- Richards, N., 2013. Lardil “Case Stacking” and the Timing of Case Assignment. *Syntax* 16, 42–76.
- Rizzi, L., 1990. Relativized Minimality.
- Rizzi, L., 2001. Extraction from weak islands, reconstruction, and agreement. In: Chierchia, G., Guasti, T., Cechetto, C. (Eds.), *Semantic Interfaces*. CSLI Publications, Stanford, CA, pp. 145–176.
- Rizzi, L., 2013. Locality. *Lingua* 130, 169–186.
- Roberts, I., Holmberg, A., 2010. Introduction: parameters in minimalist theory. In: Biberauer, T., Holmberg, A., Roberts, I., Sheehan, M. (Eds.), *Parametric Variation. Null Subjects in Minimalist Theory*. Cambridge University Press, Cambridge, pp. 1–57.
- Schadeberg, T.C., 1986. Tone cases in Umbundu. *Afr. Linguist.* 10, 427–445.
- Schütze, C.T., 2001. On Korean “case stacking”: the varied functions of the particles *ka* and *lul*. *Linguist. Rev.* 18, 193–232.
- Sheehan, M., van der Wal, J., Submitted. Nominal licensing without abstract Case.
- Sigurðsson, H.Á., 1989. *Verbal syntax and Case in Icelandic*. University of Lund.
- Sigurðsson, H.Á., 1992. The case of Quirky subjects. *Working Papers in Scandinavian Syntax* 49, 1–26.
- Sitaridou, I., 2006. The (dis)association of Tense, phi-features EPP and nominative Case: Case studies from Romance and Greek. In: Costa, J., Silva, M.C.F. (Eds.), *Studies on Agreement*. John Benjamins, Amsterdam, pp. 243–260.
- Sundaresan, S., McFadden, T., 2009. Subject distribution in Tamil and other languages: selection vs Case. *JSAL* 2, 5–34.
- Szabolcsi, A., 2009. Overt nominative subjects in infinitival complements in Hungarian. In: Dikken, M.d., Vago, R.M. (Eds.), *Approaches to Hungarian*. Papers from the 2007 NYU Conference. John Benjamins, Amsterdam.
- Torrego, E., 1998. *The Dependencies of Objects*. MIT Press, Cambridge, MA.
- Ura, H., 1994. Varieties of raising and the feature-based theory of movement. In: *MIT Occasional Papers in Linguistics* 7.
- van der Wal, J., 2009. Word order and information structure in Makuwa–Enahara. *LOT, Utrecht*.
- van der Wal, J., 2012. Subject agreement and the EPP in Bantu Agreeing Inversion. *Cambridge Occasional Papers Linguist.* 6, 201–236.
- van der Wal, J., 2014. Subordinate clauses and exclusive focus in Makuwa. In: van Gijn, R., Hammond, J., Matic, D., van Putten, S., Galucio, A.V. (Eds.), *Information Structure and Reference Tracking in Complex Sentences*. John Benjamins, Amsterdam, pp. 45–70.
- van der Wal, J., 2015. A note on the (non-existing) passive in Matengo. *Linguist. Lang. Afr.* (in press).
- van der Wal, J., Namyalo, S., Submitted. The interaction of two focus marking strategies in Luganda.
- Varlokosta, S., 1994. *Issues on Modern Greek Sentential Complementation*. University of Maryland.
- Vergnaud, J.-R., 1977. Letter to Noam Chomsky and Howard Lasnik.
- Wiltschko, M., 2011. Nominal licensing via Case or deictic anchoring. In: *Proceedings of the 2011 annual conference of the Canadian Linguistic Association*.
- Wiltschko, M., 2014. *The Universal Structure of Categories. Towards a Formal Typology*. Cambridge University Press, Cambridge.
- Woolford, E., 2006. Case-agreement mismatches. In: Boeckx, C. (Ed.), *Agreement Systems*. John Benjamins, Amsterdam, pp. 299–316.
- Yoneda, N., 2000. A descriptive study of Matengo, a Bantu language of Tanzania -with focus on verbal structure Tokyo University of Foreign Studies (in Japanese).
- Yoneda, N., 2011. Word order in Matengo (N13): Topicality and informational roles. *Lingua* 121, 754–771.
- Zeller, J., 2012. Instrument inversion in Zulu. In: Marlo, M.R., Adams, N.B., Morrison, M., Purvis, T.M. (Eds.), *Selected Proceedings of the 42nd Annual Conference on African Linguistics, Cascadia Proceedings Project, Somerville, MA*, pp. 134–148.
- Zeller, J., 2013. Locative inversion in Bantu and predication. *Linguistics* 51, 1107–1146.