# Argument prominence and agreement: Explaining an unexpected object asymmetry in Zulu

Jochen Zeller *

*Department of Linguistics, School of Arts, University of KwaZulu-Natal, Durban 4041, South Africa*

## Abstract

In the "symmetrical" Bantu language Zulu, either the beneficiary/goal or the theme argument in double object constructions can agree with the verb. The agreeing object-DP is obligatorily dislocated to a VP-external position, while the non-agreeing DP remains inside the VP. However, Zulu also has a type of double object construction in which both internal arguments are right-dislocated. In this construction, agreement is always with the beneficiary/goal, and can no longer be with the theme. My paper offers a detailed description of these "double right dislocation" constructions and a Minimalist analysis of the observed agreement asymmetry. The analysis is based on the idea that dislocated arguments in Zulu are marked as "antifocus" and that only a DP with an antifocus feature can enter an Agree-relation with the functional head responsible for object agreement. Since Agree is constrained by Locality, a theme argument can only agree with the verb when it is the sole internal argument with an antifocus feature. When both internal arguments are dislocated and marked as antifocus, the theme competes with the beneficiary/goal for the available object agreement marker. In this case, Locality determines that agreement must be with the beneficiary/goal, since this argument is thematically (and hence syntactically) more prominent than the theme, and therefore closer to the functional object agreement head.

© 2014 Elsevier B.V. All rights reserved.

*Keywords:* Bantu grammar; Object agreement; Right dislocation; Agreement asymmetries; Thematic prominence; Passivisation

## 1. Introduction

Bantu languages differ with respect to the number of internal arguments that can exhibit so-called "primary object properties" in multiple object constructions (Alsina, 1996; Bresnan and Moshi, 1990; Marten et al., 2007). In some languages, grammatical processes such as passivisation, object marking, or reciprocalisation may apply to both objects of a ditransitive verb, whereas these operations are restricted to one object in other languages. For example, in the "symmetrical" Bantu language Zulu (S 42), either object of a ditransitive verb can be realised as an object marker. In (1a), the object marker corresponds to the beneficiary argument of the applied verb *-thengela*, 'buy for', while the object marker in (1b) agrees with the theme:[1,2]

---

* Tel.: +27 722004390.
  *E-mail address:* zeller@ukzn.ac.za.

[1] All examples in this paper are from Zulu, unless otherwise indicated. Nouns in Bantu languages belong to noun classes that determine gender and number properties. Following standard practice, I mark Bantu noun class prefixes and corresponding agreement markers through numbers. Morphemes are glossed as follows: 1s/p, 2s/p = first, second person singular/plural; A = default vowel (Kilega); ADJ = adjective marker; APPL = applicative; AUG = augment; CA = complementiser agreement; CAUS = causative; DIS = disjoint verb form; EXPL = expletive; FV = final vowel; LOC = locative marker; NEG = negation; OM = object marker; PASS = passive; PAST = (recent) past tense; PERF = perfective aspect; POSS = possessive marker; SM = subject marker; SUBJ = subjunctive. I have occasionally adjusted the glosses of examples that I adopted from the literature to my system.

[2] In this paper, I treat Zulu object markers such as *m-* and *lu-* in (1) as agreement markers. When no overt DP co-occurs with the object marker, I assume that agreement is with a null pronominal. See Adams (2010) for the alternative view that object markers in Zulu are pronominal clitics; but see Buell (2005) and Zeller (2012) for arguments against a pronoun-analysis of object markers in Zulu.

(1)    a.    Ngi-*m*-theng-el-a          u-bisi          (*u-Sipho*).
             1S-1.OM-buy-APPL-FV       AUG-11.milk    AUG-1a.Sipho
             'I'm buying him (Sipho) some milk.'
       b.    Ngi-*lu*-theng-el-a         u-Sipho        (*u-bisi*).
             1S-11.OM-buy-APPL-FV      AUG-1a.Sipho   AUG-11.milk
             'I'm buying it (the milk) for Sipho.'

In contrast, constructions analogous to (1b) are ungrammatical in ''asymmetrical'' Bantu languages such as Chichewa (Alsina and Mchombo, 1993; Bresnan and Moshi, 1990) or Swahili (Marten et al., 2007; Riedel, 2009).

However, in another type of double object construction in Zulu, the symmetry illustrated by (1) breaks down. Although the sentences in (2) are based on the same verb and the same object-DPs as those in (1), object marking of the theme argument is not possible, (2b):

(2)    a.    Ngi-ya-*m*-theng-el-a        u-bisi          *u-Sipho*.
             1S-DIS-1.OM-buy-APPL-FV     AUG-11.milk    AUG-1a.Sipho
             'I *am* buying milk for Sipho.'
       b.    *Ngi-ya-*lu*-theng-el-a      u-Sipho        *u-bisi*.
             1S-DIS-11.OM-buy-APPL-FV    AUG-1a.Sipho   AUG-11.milk

The only obvious difference between the double object constructions in (1) and (2) is that the verb in the latter appears in the so-called disjoint (''long'') form, which in the present tense is marked by the prefix *ya-* in Zulu. This raises the question of how this morphological difference relates to the contrast between (1b) and (2b).

The goal of this paper is to offer an analysis of the construction in (2) which explains the difference between (1b) and (2b). The starting point of my proposal is the well-known correlation between object marking and *right dislocation*, which is observed in Zulu and other Bantu languages. In Section 2, I present data that show that object-marked object-DPs in Zulu are always in a VP-external position, which explains, amongst other things, why the beneficiary-DP follows the theme-DP in (1a), whereas the opposite order is observed in (1b).

I then demonstrate that in constructions such as (2), *both* object-DPs are dislocated and removed from their VP-internal base positions (see also Adams, 2010). This situation accounts for the choice of the disjoint verb form in (2), as well as a range of other properties of this construction, which are discussed in detail in Section 3. Since Zulu grammar only allows one object marker to attach to the verb stem, the ''double dislocation''-analysis entails that the two dislocated DPs in constructions such as (2) compete for one available object agreement marker. As (2b) shows, this competition is always resolved in favour of the beneficiary argument, even though object marking of a theme argument is possible in simple dislocation constructions such as (1b).

In Section 4, I outline the key idea behind my analysis of this contrast. Based on a proposal by Alsina (1996), I suggest that the agreement properties of internal arguments in Zulu must reflect their thematic prominence relations, but importantly, I argue that thematic prominence is only relevant for the agreement properties of *dislocated* arguments. Because beneficiary arguments are ranked higher than themes, and because both the beneficiary and the theme are dislocated in (2), object agreement must be with the higher-ranked beneficiary. In contrast, thematic prominence is of no relevance in constructions such as those in (1), in which only one internal argument is dislocated. In either clause in (1), there is only one dislocated DP, and therefore only one candidate for object agreement (the beneficiary in (1a), and the theme in (1b)). Consequently, either the beneficiary or the theme can be object-marked.

In Section 5, I present the details of my analysis of right dislocation in Zulu within the theoretical framework of the Minimalist Program (Chomsky, 1995, 2000, 2001). My objective is to show that important aspects of the idea outlined in Section 4 follow naturally in a theory in which syntactic operations are driven by grammatical features and thematic relations are represented through asymmetrical syntactic relations between arguments inside the VP. I propose that object marking in Zulu is a reflex of an Agree-relation between the uninterpretable feature of a VP-external functional head X which acts as a PROBE and the corresponding interpretable feature of a VP-internal argument which acts as a GOAL. I suggest that the relevant feature is an *antifocus* feature, which is associated with non-focused arguments in Zulu and which typically causes right dislocation of the respective constituent. Importantly, the antifocus Agree-relation is constrained by *Locality*: when more than one internal argument is marked as antifocus, only the one closest to the PROBE can Agree and trigger object marking. I suggest that this is what happens in constructions such as (2): both the theme and the beneficiary have antifocus features; therefore, both arguments will be right-dislocated, and both DPs compete for object agreement. Since the beneficiary argument is thematically more prominent than the theme, it is syntactically closer to the PROBE than the latter, and Locality determines that object agreement can only be with the beneficiary-DP. In contrast, I argue that in right dislocation constructions such as (1), only one of the two internal arguments has an antifocus feature.

Therefore, Locality does not apply in examples such as (1b), where only the theme, but not the beneficiary, is marked as antifocus. Consequently, the theme-DP is right-dislocated, and it can Agree with X and trigger object marking. The main conclusions that follow from this analysis are briefly summarised in Section 6.

## 2. Object marking and right dislocation in Zulu

### 2.1. Right dislocation diagnostics

Numerous studies of Zulu morpho-syntax have provided ample evidence that object-marked objects in Zulu are right-dislocated (see Adams, 2010; Buell, 2005, 2006; Cheng and Downing, 2009; Halpert, 2012; Van der Spuy, 1993; Zeller, 2012 a.o. for Zulu; see also Baker, 2003 for Kinande; Bresnan and Mchombo, 1987 for Chichewa). In this section, I review this evidence, thereby illustrating some of the relevant diagnostics for right dislocation in Zulu.

A first argument that object marking is correlated with right dislocation in Zulu is prosodic. In Zulu, the right edge of a phonological phrase is consistently marked through lengthening of the penultimate syllable of the last word within that phrase (Van der Spuy, 1993: 348). In examples such as (3), where the object *imoto*, 'car', agrees with the verb, the penultimate vowel of the verb is lengthened, indicating that the following object is located outside the phonological phrase established by the verb. Cheng and Downing (2009) show convincingly that in Zulu, phonological and syntactic phrases are aligned and that the right edge of the phonological phrase in examples such as (3) corresponds to the right edge of the extended VP (= $v$P).[3] The fact that the agreeing object in (3) appears to the right of the prosodic phrase break therefore implies that it is located in a $v$P-external position, i.e. it has been right-dislocated:

(3)   a.   Ngi-ya-yi-theng-a   i-moto.
           1S-DIS-9.OM-buy-FV   AUG-9.car
           'I bought (it), the car.'
      b.   ngi-ya-yi-the:nga]$_{vP}$ ## imo:to

Further evidence for right dislocation of agreeing objects is provided by the verbal morphology. In the affirmative present and the recent past tense, Zulu distinguishes between the so-called conjoint (short) and disjoint (long) form of the verb. The disjoint form is marked in the present tense by the morpheme *ya-*, (4c); in the recent past, the tense suffix *-e* is replaced by *-ile*, (5c). Importantly, the conjoint form is only possible if there is at least one postverbal constituent inside the $v$P (cf. Buell, 2005, 2006, 2008; Halpert, 2012; Van der Spuy, 1993):

(4)   a.   U-mama          u-phek-a        i-n-yama.        (√ conjoint)
           AUG-1a.mother   1.SM-cook-FV    AUG-9-meat
           'Mother is cooking meat.'
      b.   *U-mama         u-phek-a.                        (* conjoint)
           AUG-1a.mother   1.SM-cook-FV
      c.   U-mama          u-*ya*-phek-a.                   (√ disjoint)
           AUG-1a.mother   1.SM-DIS-cook-FV
           'Mother is cooking.'

(5)   a.   Ngi-fund-e    i-n-cwadi.                         (√ conjoint)
           1S-read-PAST  AUG-9-book
           'I was reading/studying a book.'
      b.   *Ngi-fund-e.                                     (* conjoint)
           1S-read-PAST
      c.   Ngi-fund-*ile*.                                  (√ disjoint)
           1S-read-PAST.DIS
           'I was reading/studying.'

When the object of a monotransitive verb is object-marked, the disjoint form is obligatory (provided there is no other material in the $v$P), which demonstrates that the object-marked DP is dislocated and no longer in its base position:

---

[3] The "extended VP" is commonly understood as the VP-node which includes all arguments of the verb, including the external argument (the logical subject). In this paper, I follow the current practice in the Minimalist Program and use $v$P (the so-called light verb phrase) as a label for the extended VP.

(6)    U-mama          u-*(ya)-yi-phek-a          i-n-yama.
       AUG-1a.mother   1.SM-DIS-9.OM-cook-FV   AUG-9-meat
       'Mother is cooking it, the meat.'

(7)    Ngi-yi-fund-ile/*-e              i-n-cwadi.
       1S-9.OM-read-PAST.DIS/PAST   AUG-9-book
       'I was reading/studying it, the book.'

(8)    a.    *…uyipheka inyama]$_{vP}$    (conjoint verb form: object agreement with in situ object)
       b.    …uyayipheka]$_{vP}$ inyama   (disjoint verb form: object agreement with dislocated object)

Examples such as (9), in which a transitive verb is followed by the manner adverb *kahle*, 'well', also support the conclusion that agreeing objects in Zulu are dislocated (see Van der Spuy, 1993):

(9)    a.    Si-bon-a   i-n-kosi       kahle.
             1P-see-FV   AUG-9-chief   well
             'We are seeing the chief well.'
       b.    *Si-*yi*-bon-a       i-n-kosi       kahle.
             1P-9.OM-see-FV   AUG-9-chief   well
       c.    *Si-bon-a    kahle   i-n-kosi.
             1P-see-FV   well   AUG-9-chief
       d.    Si-*yi*-bon-a       kahle   i-n-kosi.
             1P-9.OM-see-FV   well   AUG-9-chief
             'We are seeing him well, the chief.'

''Low'' manner adverbs such as *kahle* are right-adjoined to VP in Zulu (Zeller, 2012). A preceding object must therefore be located inside the VP. In this position, it cannot be object-marked, (9a and b). If the object follows the adverb, however, object marking is obligatory, (9c and d). The examples in (9) hence show that object agreement is correlated with object right dislocation and are consistent with the view that agreeing objects appear outside $vP$ in Zulu (note that the verb in (9d)/(10) is in the conjoint form because the VP-adjunct *kahle* is in a $vP$-internal position):

(10)    …siyibona kahle]$_{vP}$… inkosi  = (9d)

Next, consider focus. In Zulu, $vP$-external material can never be narrowly focused. Rather, a focused DP must appear $vP$-internally, typically in the immediate-after-the-verb (IAV) position (see Buell, 2008, 2009; Cheng and Downing, 2009; Zeller, 2008). For example, subject focus is licensed in expletive constructions with V-S word order in which the subject has remained in its base position in $vP$, but not when the subject is in the canonical preverbal (= $vP$-external) subject position (the focused subjects in (11) are modified by the focus marker *kuphela*; in (12), the focused subjects are wh-phrases):

(11)    a.    Ku-fik-e             u-Sipho         kuphela.
             17.EXPL-arrive-PAST   AUG-1a.Sipho   only
             'Only Sipho arrived.'
       b.    *U-Sipho          kuphela   u-fik-ile.
             AUG-1a.Sipho   only          1.SM-arrive-PAST.DIS

(12)    a.    Ku-sebenz-e          bani?
             17.EXPL-work-PAST   1a.who
             'Who worked?'
       b.    *U-bani       u-sebenz-ile?
             AUG-1a.who   1.SM-work-PAST.DIS

An object-DP in Zulu can be focused postverbally, but *not* when its corresponding object marker is attached to the verb, even when the object is linearly still in the IAV-position (Adams, 2010; Buell, 2008). This provides further evidence that object-marked DPs are no longer located inside the $vP$:

(13)    a.    Ngi-bon-e   u-Sipho         kuphela]$_{vP}$.
             1S-see-PAST   AUG-1a.Sipho   only
             'I saw only Sipho.'

b.    *Ngi-m-bon-ile]$_{\nu P}$    u-Sipho    kuphela.
        1S-1.OM-see-PAST.DIS   AUG-1a.Sipho  only

[Buell, 2008: ex. (6)]

(14)  a.    U-cul-e    i-phi      i-n-goma]$_{\nu P}$?
            2S-sing-PAST  9.ADJ-which  AUG-9-song
            'Which song did you sing?'
     b.    *U-yi-cul-ile]$_{\nu P}$        i-phi      i-n-goma?
            2S-9.OM-sing-PAST.DIS  9.ADJ-which  AUG-9-song

[Buell, 2008: ex. (5)]

Finally, object marking in Zulu is also ruled out when the object is a negative polarity item (NPI) (Adams, 2010; Halpert, 2012):[4]

(15)  a.    A-ngi-bon-anga     mu-ntu]$_{\nu P}$.
            NEG-1S-see-PAST.NEG  1-person
            'I didn't see anyone.'
     b.    *A-ngi-m-bon-anga]$_{\nu P}$    mu-ntu.
            NEG-1S-1.OM-see-PAST.NEG  1-person

When a noun such as *umuntu*, 'person', in Zulu loses its initial vowel (the augment), it is obligatorily non-specific and can be interpreted as an NPI, as shown in (15a). Halpert (2012) argues that augmentless objects in Zulu need structural Case, and she shows that structural case cannot be assigned to $\nu$P-external elements. Moreover, non-specific objects are generally not tolerated in dislocated positions (cf. Baker, 2003). Given these conditions, the ungrammaticality of (15b) is consistent with the assumption that object-marked DPs in Zulu are always dislocated.

## 2.2. Right dislocation in double object constructions

The basic word order in Zulu double object constructions with a beneficiary/goal and a patient/theme argument is ben/goal > pt/th. The opposite word order is illicit. This is demonstrated with a derived applied verb in (16) and with an underived ditransitive verb in (17):

(16)  a.    Ngi-theng-el-a  u-Sipho     u-bisi.
            1S-buy-APPL-FV  AUG-1a.Sipho  AUG-11.milk
            'I'm buying milk for Sipho.'
     b.    *Ngi-theng-el-a  u-bisi       u-Sipho.
            1S-buy-APPL-FV  AUG-11.milk  AUG-1a.Sipho

(17)  a.    U-John       u-nik-e       a-ba-ntwana  i-mali.
            AUG-1a.John  1.SM-give-PAST  AUG-2-child   AUG-9.money
            'John gave the children money.'
     b.    *U-John      u-nik-e       i-mali      a-ba-ntwana.
            AUG-1a.John  1.SM-give-PAST  AUG-9.money  AUG-2-child

However, when the beneficiary/goal agrees with the verb, the word order changes. The beneficiary/goal must now follow the theme (Adams, 2010; Bosch, 1985; Zeller, 2012):[5]

(18)  a.    Ngi-m-theng-el-a  u-bisi      u-Sipho.
            1S-1.OM-buy-APPL-FV  AUG-11.milk  AUG-1a.Sipho
            'I'm buying him milk, Sipho.'

---

[4] Negated verbs in Zulu do not show the conjoint-disjoint alternation. Therefore, the morphology of the phrase-final verb form in (15b) is identical to the form of the non-final verb in (15a).

[5] The question marks in (18b) and (19b) indicate that some speakers occasionally accept double object constructions with object-marked beneficiary/goal arguments *in situ*, but this alternative is a marked option which is never systematically available for all speakers (see Zeller (2012) for some discussion).

b.   *?Ngi-m-theng-el-a      u-Sipho          u-bisi.
     1S-1-OM-buy-APPL-FV   AUG-1a.Sipho   AUG-11.milk

(19)  a.   U-John         u-ba-nik-e            i-mali          a-ba-ntwana.
          AUG-1a.John   1.SM-2.OM-give-PAST   AUG-9.money   AUG-2-child
          'John gave them money, the children.'
      b.   *?U-John       u-ba-nik-e            a-ba-ntwana  i-mali.
          AUG-1a.John   1.SM-2.OM-give-PAST   AUG-2-child   AUG-9.money

The word order in (18a) and (19a) follows from the fact that object-marked DPs are dislocated in Zulu. The object marker agrees with the beneficiary/goal; consequently, this argument must be in a $\nu$P-external position and therefore follows the theme-DP. The theme in (18a) and (19a) has remained inside the VP, as witnessed by the conjoint form of the verb. Note also that the penultimate vowel of the theme is lengthened:

(20) = (18a)   ...ngimthengela ubi:si]$_{VP}$ ## ... uSipho   (ben/goal right-dislocated)

As noted in the introduction, either object in a double object construction in Zulu can be object-marked and right-dislocated. (21) and (22) illustrate object marking of the theme-DPs of the verbs in (16) and (17) (see Adams, 2010; Bosch, 1985; Zeller, 2012):

(21)  Ngi-lu-theng-el-a        u-Sipho          u-bisi.
      1S-11.OM-buy-APPL-FV   AUG-1a.Sipho   AUG-11.milk
      'I'm buying it for Sipho, the milk.'

(22)  U-John         u-yi-nik-e            a-ba-ntwana  i-mali.
      AUG-1a.John   1.SM-9.OM-give-PAST   AUG-2-child   AUG-9.money
      'John gave it to the children, the money.'

Notice that object marking of the theme is not correlated with a change in word order. However, it can still be shown that the object-marked DPs in (21) and (22) are right-dislocated. First, in these examples, the penultimate vowel of the indirect object is lengthened, signalling a $\nu$P-boundary between the beneficiary/goal and the theme (cf. Cheng and Downing, 2009):

(23) = (21a)   ...ngiluthengela uSi:pho]$_{\nu P}$ ## ... ubisi   (theme right-dislocated)

Second, an object-marked theme cannot be focused:[6]

(24)  a.   *Ngi-lu-theng-el-a      u-Sipho          u-bisi        kuphela.
          1S-11.OM-buy-APPL-FV   AUG-1a.Sipho   AUG-11.milk   only
          Intended: 'I'm buying only milk for Sipho.'
      b.   *U-John          u-yi-nik-e            a-ba-ntwana  i-ni?
          AUG-1a.John    1.SM-9.OM-give-PAST   AUG-2-child   AUG-9.what
          Intended: 'What is John buying for the children?'

Third, an object-marked theme-DP cannot be realised as an NPI:

(25)  *A-ngi-lu-theng-el-i            uSipho          lutho.
      NEG-1S-11.OM-buy-APPL-NEG   AUG-1a.Sipho   11.nothing
      Intended: 'I'm not buying anything for Sipho.'

---

[6] Recall that focused elements in Zulu typically appear in the IAV position. Therefore, the word order in (24) is marked for many speakers, even if the object marker is omitted and the theme is in situ, since the beneficiary intervenes between the verb and the focused element. However, there are some speakers who find a VP-internal focused object marginally acceptable even if it is not in IAV, but even for those speakers, (24a) and (24b) are clearly unacceptable.

Finally, a ''low'' VP-adverb such as *kahle* cannot appear to the right of an object-marked theme:[7]

(26) a. Ngi-fund-is-a i-zin-gane i-si-Zulu kahle.
        1S-read-CAUS-FV AUG-10-child AUG-7-Zulu well
        'I'm teaching the children the Zulu language well.'
    b. *Ngi-si-fund-is-a i-zin-gane i-si-Zulu kahle.
        1S-7.OM-read-CAUS-FV AUG-10-child AUG-7-Zulu well
        'I'm teaching it the children well, the Zulu language.'

In sum, the correlation between object marking and right dislocation can also be observed in Zulu double object constructions.

## 3. ''Double'' right dislocation

Double object constructions with agreeing objects are widely discussed in the literature on Bantu languages (see e.g. Adams, 2010; Bosch, 1985; Cheng and Downing, 2009; Henderson, 2006; Zeller, 2012 for Zulu; De Guzman, 1987 for closely related Swati; Bresnan and Mchombo, 1987 for Chichewa; Riedel, 2009 for Sambaa and Haya; see also Marten, Kula and Thwala 2007, Marlo to appear for cross-linguistic comparisons). However, constructions such as the following from Zulu have received less attention:

(27) a. Ngi-ya-m-theng-el-a u-Sipho u-bisi.
        1S-DIS-1.OM-buy-APPL-FV AUG-1a.Sipho AUG-11.milk
        'I *am* buying milk for Sipho.'
    b. Ngi-ya-m-theng-el-a u-bisi u-Sipho.
        1S-DIS-1.OM-buy-APPL-FV AUG-11.milk AUG-1a.Sipho
        'I *am* buying milk for Sipho.'

(28) a. U-John u-ba-nik-ile a-ba-ntwana i-mali.
        AUG-1a.John 1.SM-2.OM-give-PAST.DIS AUG-2-child AUG-9.money
        'John *did* give the children the money.'
    b. U-John u-ba-nik-ile i-mali a-ba-ntwana.
        AUG-1a.John 1.SM-2.OM-give-PAST.DIS AUG-9.money AUG-2-child
        'John *did* give the children the money.'

(27) and (28) are double object constructions, based again on the applied verb *-thengela* and the underived ditransitive verb *-nika*. As in the examples in (18) and (19) above, an object marker corresponding to the beneficiary/goal is attached to the verb stem. However, there are two noteworthy grammatical differences between the examples in (18) and (19) and the constructions in (27) and (28). First, while the verbs in (18) and (19) are in the conjoint form, the verbs in (27) and (28) display the *disjoint form*. Second, the two objects in (27) and (28) can appear in *either order*. In particular, as the (a)-examples demonstrate, the object-marked beneficiary/goal can precede the theme, a possibility that was not attested with the double object constructions discussed in Section 2.2 above (see (18b) and (19b)).[8]

---

[7] Since the unmarked object in (26b) has remained inside the VP, one would expect *kahle* to be able to intervene between this object and the dislocated theme. However, this word order is also marked in Zulu:

(i) ??Ngi-si-fund-is-a i-zin-gane kahle i-si-Zulu.
     1S-7.OM-read-CAUS-FV AUG-10-child well AUG-7-Zulu
     'I'm teaching it the children well, the Zulu language.'

I do not have a satisfactory explanation for why (i) is not fully acceptable. An anonymous reviewer points out that adverbs meaning 'well' show similar unexpected behaviour in other Bantu languages. In Makhuwa, for example, the adverb *saána*, 'well', cannot follow the conjoint form of the verb, even though other adverbs are compatible with the conjoint form (see Van der Wal, 2009). Van der Wal (2009:222) argues that *saána* is ''subject to a specific syntactic constraint'' in Makhuwa, which explains its exceptional status. Perhaps there is a comparable syntactic constraint in Zulu that rules out theme dislocation with *kahle* in double object constructions, but the precise nature of this constraint is unclear at this point.

[8] A third difference is semantic. As indicated by the translations, constructions such as (27) and (28) are typically interpreted as expressing verum (polarity) focus, an interpretation that is not available for the right dislocation constructions discussed in Section 2.2. Other interpretations occasionally reported by speakers are narrow verb focus, or habituality of the activity expressed by the verb. All these interpretations fall under the category ''auxiliary focus'' discussed in Hyman and Watters (1984), which is defined as focus ''placed on any of the semantic parameters which serve as operators on propositions: tense, aspect, mood, polarity'' (p. 236). The auxiliary focus interpretation of (27) and (28) is consistent with the fact that in these constructions, both object-DPs are dislocated and cannot be narrowly focused (as I will show below). However, I have to leave the question of how exactly the auxiliary focus semantics of these examples relates to their syntax as a topic for future research (but see footnote 14 for some speculations).

Examples such as (27) and (28) are discussed in Adams (2010), who argues that in these constructions, *both* objects are dislocated. This claim is compatible with the two differences just noted: as was shown in Section 2, the disjoint verb form signals that material following the verb must be outside the *v*P, and the fact that the two objects in (27) and (28) can appear in either order also suggests that these arguments are not associated with their VP-internal base positions (which require a fixed order ben/goal > pt/th, as shown above). Furthermore, note also that the penultimate syllable of the verbs in (27) and (28) is lengthened:

(29)  a.    . . . ngiyamthenge:la]$_{vP}$ ## . . . ubisi . . . uSipho
       b.    . . . ngiyamthenge:la]$_{vP}$ ## . . . uSipho . . . ubisi

The "double" right dislocation analysis schematically represented in (29) is supported by additional evidence. First, neither of the two postverbal objects in examples such as (27) or (28) can be focused or questioned. Recall that in Zulu, focused elements typically appear in the IAV-position. However, in the above type of constructions, neither the beneficiary/goal nor the patient/theme can be modified by a focus marker or realised as a wh-phrase, even when the focused DP immediately follows the verb:

(30)  a.    *Ngi-ya-yi-theng-el-a       i-n-ja        kuphela  u-bisi            (hhayi i-kati).
             1S-DIS-9.OM-buy-APPL-FV  AUG-9-dog  only        AUG-11.milk not  AUG-5.cat
             Intended: 'I *am* buying milk only for the dog (and not for the cat).'
       b.    *U-ya-yi-theng-el-a        yi-phi     i-n-ja        u-bisi?
             2S-DIS-9.OM-buy-APPL-FV  9-which  AUG-9-dog  AUG-11.milk
             Intended: 'For which dog *are* you buying milk?'

(31)  a.    *Ngi-ya-yi-theng-el-a       u-bisi         kuphela  i-n-ja.
             1S-DIS-9.OM-buy-APPL-FV  AUG-11.milk  only        AUG-9-dog
             Intended: 'I *am* buying only milk for the dog.'
       b.    *U-ya-yi-theng-el-a        zi-phi       i-zin-to         i-n-gane?
             2S-DIS-9.OM-buy-APPL-FV  10-which  AUG-10-thing  AUG-9-child
             Intended: 'Which things *are* you buying for the child?'

Second, neither of the two objects in this construction can be an NPI:[9]

(32)  a.    *A-ngi-m-theng-el-anga           mu-ntu      i-moto.
             NEG-1S-1.OM-buy-APPL-PAST.NEG  1-person  AUG-9.car
             Intended: 'I didn't buy a car for anyone.'
       b.    *A-ngi-m-theng-el-anga           u-m-ngane    wa-mi.      lutho.
             NEG-1S-1.OM-buy-APPL-PAST.NEG  AUG-1-friend  1.POSS-my  nothing
             Intended: 'I didn't buy anything for my friend.'

Finally, the representation in (29) correctly predicts that a "low" VP-adverb such as *kahle* can intervene between the verb and both objects (recall that *kahle* is a VP-adjunct and located inside *v*P; therefore the verb in (33) is in the conjoint form):

---

[9] Since negative verb forms do not show the conjoint/disjoint alternation in Zulu, the examples in (32) only show the order ben/goal > theme. With the opposite order, double right dislocations with a negated verb are hard to distinguish from constructions with an *in situ* theme and a right-dislocated beneficiary/goal. Notice that in the latter configuration, the theme can be an NPI, because it is not dislocated:

(i)  A-ngi-m-theng-el-anga           lutho]$_{vP}$ u-m-ngane    wa-mi.
     NEG-1S-1.OM-buy-APPL-PAST.NEG  nothing      AUG-1-friend  1.POSS-my
     'I didn't buy anything for my friend.'

However, notice that (i) is only possible when the penultimate vowel of the *v*P-internal theme *lutho* is lengthened. Lengthening of the penult of the verb, which would signal that *lutho* is outside the *v*P, would make (i) ungrammatical. For the same reason, an adverb like *kahle* cannot intervene between the verb and the theme when the theme is an NPI (compare (ii) and (33a) in the text):

(ii) *A-ngi-m-phek-el-anga           kahle]$_{vP}$ lutho     umgane       wami.
     NEG-1S-1.OM-cook-APPL-PAST.NEG  well         nothing  AUG-1-friend  1.POSS-my
     Intended: 'I didn't cook anything well for my friend.'

(33)  a.   Ngi-ba-tshel-a   kahle   a-ba-fundi       i-n-daba.
           1s-2.om-tell-fv   well    aug-2-student   aug-9-story
           'I *am* telling the students the story well.'
      b.   *Ngi-ba-tshel-a   a-ba-fundi       i-n-daba       kahle.
           1s-2.om-tell-fv   aug-2-student   aug-9-story   well

I conclude from these data that in Zulu double object constructions in which both objects can follow the long form of the verb in either order, both object-DPs are dislocated. In the remainder of the paper, I therefore refer to sentences such as (27) and (28) as ''double right dislocation'' (DRD-) constructions.

In contrast to Bantu languages such as Kinyarwanda or Kichaga, Zulu allows only one object marker to be attached to the verb stem. Therefore, the 1:1-correlation between dislocation and object marking cannot be maintained in DRD-constructions.[10] Although both object-DPs are dislocated, only one can agree with the verb (a syntactic reason for this fact is provided in Section 5). Crucially, the agreeing object must be the beneficiary/goal; DRD-constructions in which the theme agrees with the verb are ungrammatical, regardless of the word order in which the two dislocated objects appear:

(34)  a.   *Ngi-ya-lu-theng-el-a       u-Sipho       u-bisi.
           1s-dis-11.om-buy-appl-fv   aug-1a.Sipho   aug-11.milk
      b.   *Ngi-ya-lu-theng-el-a       u-bisi       u-Sipho.
           1s-dis-11.om-buy-appl-fv   aug-11.milk   aug-1a.Sipho
           Intended: 'I *am* buying milk for Sipho.'

(35)  a.   *U-John       u-yi-nik-ile                 a-ba-ntwana   i-mali.
           aug-1a.John   1.sm-9.om-give-past.dis   aug-2-child   aug-9.money
      b.   *U-John       u-yi-nik-ile                 i-mali       a-ba-ntwana.
           aug-1a.John   1.sm-9.om-give-past.dis   aug-9.money   aug-2-child
           Intended: 'John *did* give the children the money.'

It is important to note that examples such as (34) and (35) remain ungrammatical even when animacy is controlled for. (36) is a double object construction with two animate objects. The examples in (37), with an agreeing beneficiary/goal and the verb in the disjoint form, are the corresponding DRD-constructions:

(36)  U-Langa       u-fund-is-el-a              u-Zama       a-ba-fundi.
      aug-1a.Langa   1.sm-teach-caus-appl-fv   aug-1a.Zama   aug-2-student
      'Langa is teaching the students on behalf of Zama.'

(37)  a.   U-Langa       u-ya-m-fund-is-el-a                   u-Zama       a-ba-fundi.
           aug-1a.Langa   1.sm-dis-1.om-teach-caus-appl-fv   aug-1a.Zama   aug-2-student
           'Langa *is* teaching the students on behalf of Zama.'

      b.   U-Langa       u-ya-m-fund-is-el-a                   a-ba-fundi       u-Zama.
           aug-1a.Langa   1.sm-dis-1.om-teach-caus-appl-fv   aug-2-student   aug-1a.Zama
           'Langa *is* teaching the students on behalf of Zama.'

If the ungrammaticality of the examples in (34) and (35) was due to the inanimacy of the theme, we would expect that DRD-constructions based on (37) are possible with an agreeing patient/theme-DP. However, (38) shows that this is not the case:

(38)  a.   *U-Langa       u-ya-ba-fund-is-el-a                   u-Zama       a-ba-fundi.
           aug-1a.Langa   1.sm-dis-2.om-teach-caus-appl-fv   aug-1a.Zama   aug-2-student
      b.   *U-Langa       u-ya-ba-fund-is-el-a                   a-ba-fundi       u-Zama.
           aug-1a.Langa   1.sm-dis-2.om-teach-caus-appl-fv   aug-2-student   aug-1a.Zama
           Intended: 'Langa *is* teaching the students on behalf of Zama.'

---

[10] Adams (2010) argues that in DRD-constructions, *two* object markers are attached to the verb, one for each dislocated object, but that the object marker corresponding to the patient/theme is phonologically zero in these constructions. This stipulation seems mainly motivated by Adams's analysis of object marking as pronominal incorporation. See Zeller (2012) for arguments against a pronoun-analysis of object marking in Zulu and against the claim that Zulu has null object markers.

Note that the examples in (38) are acceptable with the (unintended) meaning that Langa did teach Zama on behalf of the students. This shows that the DP which agrees with the verb in DRD-constructions is obligatorily interpreted as the beneficiary/goal.

The same contrast is observed in constructions with two inanimate objects. Although it is difficult to construct examples of benefactive applicative constructions with two inanimate objects, the following sentence was accepted by most of my informants:[11]

(39)    ?Ngi-theng-el-a  i-n-dlu        ya-mi       i-fastela.
        1S-buy-APPL-FV   AUG-9-house   9.POSS-my   AUG-5.window
        'I'm buying a window for my house.'

A DRD-construction based on (39) can only be formed when the beneficiary is realised as an object marker:

(40)    ?Ngi-ya-yi-theng-el-a       i-n-dlu        ya-mi       i-fastela.
        1S-DIS-9.OM-buy-APPL-FV     AUG-9-house   9.POSS-my   AUG-5.window
        'I *am* buying a window for my house.'

(41)    a.    *Ngi-ya-li-theng-el-a       i-n-dlu        ya-mi       i-fastela.
              1S-DIS-5.OM-buy-APPL-FV     AUG-9-house   9.POSS-my   AUG-5.window
        b.    *Ngi-ya-li-theng-el-a       i-fastela      i-n-dlu        ya-mi.
              1S-DIS-5.OM-buy-APPL-FV     AUG-5.window   AUG-9-house   9.POSS-my
              Intended: 'I *am* buying a window for my house.'

The data confirm that the dislocation of two object-DPs in Zulu is possible only if the beneficiary/goal is realised as an object marker. This asymmetry is unexpected, given that either object-DP can be object-marked when only one object is dislocated. In the following sections, I present an analysis which explains this asymmetry.

## 4. Prominence-based agreement

The preceding section has shown that DRD in Zulu is never possible with an object-marked theme, despite the fact that object marking of a patient/theme is grammatical in ''ordinary'' right dislocation constructions. The relevant data which illustrate this situation were presented in Sections 2 and 3 and are repeated in (42) and (43):

(42)    a.    U-John        u-ba-nik-e            i-mali        a-ba-ntwana.
              AUG-1a.John   1.SM-2.OM-give-PAST   AUG-9.money   AUG-2-child
              'John gave them money, the children.'
        b.    U-John        u-yi-nik-e            a-ba-ntwana   i-mali.
              AUG-1a.John   1.SM-9.OM-give-PAST   AUG-2-child   AUG-9.money
              'John gave it to the children, the money.'

(43)    a.    U-John        u-ba-nik-ile              i-mali        a-ba-ntwana.
              AUG-1a.John   1.SM-2.OM-give-PAST.DIS   AUG-9.money   AUG-2-child
              'John *did* give the children the money.'
        b.    *U-John       u-yi-nik-ile              a-ba-ntwana   i-mali.
              AUG-1a.John   1.SM-9.OM-give-PAST.DIS   AUG-2-child   AUG-9.money
              Intended: 'John *did* give the children the money.'

The contrast between (43a) and (43b) is reminiscent of another asymmetry that is found in Zulu.[12] Notice that in Zulu, each argument of a ditransitive verb can be passivised:

---

[11] Constructions with an animate patient/theme and an inanimate beneficiary/goal seem to be highly marked in Zulu (see also Bosch, 1985). Zeller (2012: 228) presents a marginally acceptable example, but this example turned out to be unacceptable in a DRD-construction.

[12] I am indebted to Larry Hyman for bringing to my attention the relevance of the contrast between (45) and (46) for the object marking asymmetry demonstrated by (43).

(44) a. A-ba-ntwana ba-nik-w-a i-mali.
        AUG-2-child 2.SM-give-PASS-FV AUG-9.money
        'The children are given money.'
    b. I-mali i-nik-w-a a-ba-ntwana.
        AUG-9.money 9.SM-give-PASS-FV AUG-2-child
        'The money is given to the children.'

Zulu also allows passivisation and object marking to apply to two objects simultaneously. In fact, it is this ability of both arguments of a ditransitive verb to exhibit primary object properties in the same clause that makes Zulu a symmetrical language (see Alsina, 1996; Bresnan and Moshi, 1990). As (45) shows, when a beneficiary/goal argument is promoted to subject position, the theme can be right-dislocated and object-marked:

(45) A-ba-ntwana ba-ya-yi-nik-w-a i-mali.
      AUG-2-child 2.SM-DIS-9.OM-give-PASS-FV AUG-9.money
      'The children are given it, the money.'

However, the opposite scenario is not possible in Zulu (Adams, 2010; Zeller, 2012). Although theme passivisation is possible (see (44b)), the theme cannot be promoted to subject position when the beneficiary/goal is simultaneously realised as an object marker.

(46) *I-mali i-ya-ba-nik-w-a a-ba-ntwana.
      AUG-9.money 9.SM-DIS-2.OM-give-PASS-FV AUG-2-child
      Intended: 'The money is given to them, the children.'

The same contrast is also observed in other symmetrical Bantu languages (see Alsina, 1996 for Sesotho and Kinyarwanda; De Guzman, 1987, Woolford, 1995 for Swati; Visser, 1986 for Xhosa). Given that passivisation and object marking can simultaneously apply in the same clause in symmetrical languages, it is surprising that it is not possible to passivise the theme when the beneficiary/goal is object-marked.

I now suggest that the ungrammaticality of DRD-constructions such as (43b) and the ungrammaticality of passive constructions such as (46) have the same underlying cause. Following a proposal made in Alsina (1996), I argue that both (43b) and (46) constitute a mismatch between the thematic prominence ranking of the internal arguments in the clause and their agreement properties. In the remainder of this section, I show that the object agreement facts discussed in Sections 2 and 3 as well as the passive data in (44)–(46) can be captured through a constraint that regulates the relation between agreement and thematic roles in Bantu. In the next section, I propose a Minimalist analysis of the data and demonstrate that key aspects of this constraint can be derived from independent syntactic principles.

In order to explain why constructions such as (46) are impossible in many symmetrical Bantu languages, Alsina (1996) proposes that arguments are ranked according to their thematic prominence (Alsina, 1996: 688):

(47) Thematic prominence relations:
      ag > ben > exp/goal > ins > pt/th > loc

According to (47), agents are more prominent than beneficiaries, which are more prominent than goals etc. The idea that thematic roles are hierarchically ordered also underlies much work in generative grammar, where prominence relations such as those in (47) are represented syntactically through asymmetrical c-command relations between the respective arguments. I return to this point in Section 5.
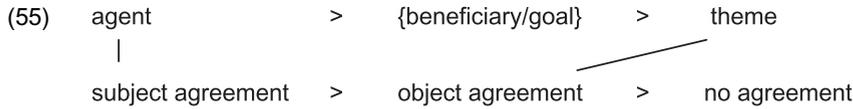
Based on (47), Alsina then suggests that passive constructions such as (46) are ruled out by the following constraint:

(48) Constraint on Word-Internal Encoding of Arguments (Alsina, 1996: 695)
      Morphologically encoded arguments cannot exhibit a mismatch in prominence between argument structure and the grammatical function hierarchy.

The ''morphological encoding of arguments'' refers to subject and object marking. Since subjects are higher than objects on the grammatical function hierarchy, (46) violates (48): a beneficiary or goal is more prominent than a theme, but the former is realised as the object marker in (46) while the lower ranked theme is encoded as the subject marker.

I suggest that the key idea behind Alsina's constraint in (48) can also explain the ungrammaticality of (43b). Because the beneficiary/goal is ranked higher than the theme, only the beneficiary/goal can be object-marked in DRD-constructions.

Both (43b) and (46) are impossible because of a lack of correspondence between the thematic hierarchy (beneficiary/goals are more prominent than themes) and the agreement relations which encode grammatical functions: subject agreement is more prominent than object agreement (so the theme cannot become a subject in (46)), but object agreement is more prominent than no agreement at all (so a theme cannot trigger object agreement in (43b)).

However, in its present form, (48) cannot capture the ungrammaticality of (43b), because it only regulates the agreement properties of "morphologically encoded" arguments in terms of the hierarchy in (47). Since Zulu only allows for one object marker per verb, only one of the two internal arguments that compete for object marking in DRD-constructions can be morphologically encoded. Therefore, (48) is silent about the relation between these two arguments. I therefore propose to capture the effects of (48) through the constraint in (49), which is a modified version of Alsina's constraint in (48), and through the agreement hierarchy in (50):

(49)    Constraint on Word-Internal Encoding of Arguments
        The prominence relations between dislocated arguments established through morphological encoding
        ("agreement prominence") must match their thematic prominence relations.

(50)    Agreement Prominence Relations:
        subject agreement > object agreement > no agreement

(50) explicitly spells out Alsina's "grammatical function hierarchy" of morphologically encoded arguments by stating that subject marking is more prominent than object marking. It further articulates the idea that in terms of grammatical function, any type of agreement with a thematic argument is more prominent than no agreement.

Taken together, (49) and (50) capture the ungrammaticality of (46) in the spirit of Alsina's constraint in (48). Since both the beneficiary/goal and the theme in (46) are in $v$P-external positions, they are both "dislocated arguments" in the sense of (49). The theme is thematically less prominent than the beneficiary, but in (46), it is more prominent on the agreement scale. The resulting mismatch, illustrated by crossing lines in (51), constitutes a violation of (49):

(51)    *    beneficiary/goal        >       theme

                 subject agreement    >     object agreement

In contrast, (45) is grammatical, because the agreement hierarchy established in (45) matches the thematic relation between the two arguments:

(52)    √    beneficiary/goal        >       theme
                     |                          |
                 subject agreement    >     object agreement

Now consider the ungrammatical instance of DRD in (43b). As was shown in Section 3, both internal arguments are right-dislocated in DRD, and given that preverbal subjects are also in $v$P-external positions, (49) applies to all three arguments in (43). (43b) is ruled out, because the theme shows object agreement with the verb, although there is a thematically more prominent dislocated argument (the beneficiary/goal) which does not show any agreement:

(53)    *    agent                  >       beneficiary/goal    >       theme
                 |
             subject agreement    >     object agreement    >     no agreement

In order for DRD to obey the principle in (49), the agent must express subject agreement, and the beneficiary/goal must be object-marked. This leaves dislocation of the theme without a morphological reflex, as in (43a):

(54)    √    agent                  >       beneficiary/goal    >       theme
                 |                              |                           |
             subject agreement    >     object agreement    >     no agreement

The principle in (49) and the hierarchy in (50) correctly account for the ungrammaticality of both (43b) and (46). But in addition, (49) also explains why object marking of the theme is grammatical in simple right dislocation constructions such as (42b). Importantly, (49) only requires a match between agreement and thematic prominence hierarchies with

respect to *dislocated* arguments. Arguments that are in their base position inside *v*P are excluded from the evaluation. In constructions such as (42b), in which the theme is dislocated, the beneficiary/goal argument has remained inside the VP. Consequently, the beneficiary/goal argument is opaque to the constraint in (49):
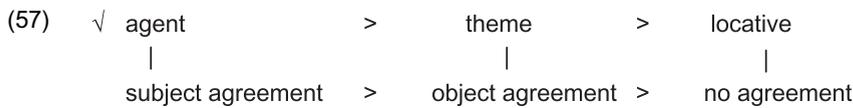
(55)   agent                  >    {beneficiary/goal}    >    theme
        |
       subject agreement   >    object agreement      >    no agreement

Even though (42b) includes an internal argument which is higher on the prominence hierarchy than the theme, the latter can be object-marked, because the former is not dislocated. Notice that the same situation explains why Zulu has an alternating passive: although the theme is thematically lower ranked than the beneficiary in (44b), it is allowed to be passivised and to show subject agreement, because the beneficiary/goal has remained inside the VP.

This analysis of object marking in DRD-constructions in terms of the constraint in (49) and the prominence relations in (47) and (50) makes an important empirical prediction. So far, I have only investigated DRD-constructions in which the theme is the thematically less prominent one of the two internal arguments. However, it is now predicted that DRD-constructions with an agreeing theme should be possible in constructions in which the theme is thematically *more* prominent than the second argument. The following data show that this prediction is indeed confirmed:

(56)   a.   Ngi-ya-yi-bek-a      i-n-cwadi        e-tafule-ni.
            1S-DIS-9.OM-put-FV   AUG-9-book       LOC-5.table-LOC
            'I *am* putting the book on the table.'
       b.   Ngi-ya-yi-bek-a      e-tafule-ni      i-n-cwadi.
            1S-DIS-9.OM-put-FV   LOC-5.table-LOC  AUG-9-book
            'I *am* putting the book on the table.'

The examples in (56) are DRD-constructions based on the verb *-beka*, 'put', which selects a theme and a locative argument. Since locatives are thematically less prominent than themes (see (47)), the theme-DP is able to trigger object marking, even when both arguments are dislocated:[13]

(57)   √   agent                  >    theme           >    locative
            |                             |                    |
           subject agreement     >    object agreement  >    no agreement

To summarise: the contrast between (42b) and (43b) that this paper set out to explain follows from the requirement that in Zulu, thematic prominence relations must be reflected by the agreement properties of arguments that have been dislocated from their base positions inside the *v*P. In constructions in which only one of two internal arguments is dislocated, there is only one candidate for object marking, and if this sole candidate is the theme, it will be object-marked. A non-dislocated beneficiary/goal does not prevent this from happening, since it does not compete with the theme for the object marker. However, in constructions in which both internal arguments are dislocated, their thematic properties determine which one can agree, and which one cannot.

## 5. The syntax of dislocation, antifocus, and Locality

The preceding discussion has shown that the possibility of object marking the theme-DP in Zulu depends on what happens with the beneficiary/goal-DP. When the latter remains in the VP, the theme can be object-marked, but when the beneficiary/goal is also dislocated, object marking of the theme is no longer possible. The analysis presented in Section 4 captures this fact through a stipulation: the constraint in (49), which requires a match between thematic and agreement hierarchies, applies only to dislocated arguments.

In this section, I present a Minimalist analysis of right dislocation in Zulu which explains this particular aspect in terms of the mechanisms and constraints that govern feature-driven operations in the syntax. In Section 5.1, I introduce the basic Minimalist assumptions I adopt. My analysis of right dislocation is presented in Section 5.2. Section 5.3 is concerned with

---

[13] The argument would be stronger if it could also be shown that object marking of the locative in (56) is possible in simple dislocation constructions, but not in DRD-constructions. The problem is that locatives in Zulu never trigger object agreement, presumably because locatives are not DPs in this Bantu language (cf. Buell, 2012). This part of the prediction made by my analysis can therefore not be tested with constructions such as (56).

subject movement and the external argument, and Section 5.4 extends my analysis to passive constructions. Finally, Section 5.5 addresses the nature of the movement operations that are associated with subject and object agreement in Zulu.

### 5.1. PROBES, GOALS, and Locality

In the Minimalist Program (Chomsky, 1995 and subsequent work), all phrasal movement is assumed to be feature-driven. The uninterpretable feature (or features) of a functional head F acts as a PROBE that searches for a GOAL, i.e. the corresponding interpretable feature of a category F' in the c-command domain of the PROBE (Chomsky, 2000). When a PROBE finds a matching GOAL, the operation Agree applies, and any unvalued uninterpretable features of F are valued by the features of F'. Valued uninterpretable features may receive a phonetic interpretation, but they are deleted before LF. Movement takes place when F also has an EPP-feature, which means that it attracts F' to its specifier. In wh-constructions, for example, the functional category C is equipped with an uninterpretable wh-feature (sometimes labelled Q) which agrees with the interpretable wh-feature [iWh] of a wh-phrase (Chomsky, 1995). In a language such as English, where wh-C has the EPP-property, a wh-phrase undergoes movement to [Spec, C], leaving behind an unpronounced copy:

(58)   What did John read?

(59)   a.   [$C_{Q, EPP}$ [John [read what$_{[iWh]}$]]]

Agree

       b.   [what$_{[iWh]}$ $C_{Q, EPP}$ [John [read ~~what~~]]]

Move

Categories may also host more than one type of uninterpretable feature. In the Bantu language Kilega, for example, wh-phrases which move to [Spec, C] trigger noun class agreement on the verb (Carstens, 2005; Kinyalolo, 1991):

(60)   Bikí      bi-á-kás-íl-é           bábo    bíkulu mwámí      mu-mwílo?
       8.what   8.CA-A-give-PERF-FV     2.that  2.woman 1.chief   LOC-3.village
       'What did those women give the chief in the village?'

[Kilega; Carstens, 2005: 220]

According to Carstens (2005), wh-C in Kilega hosts both Q and uninterpretable φ-features ([uφ]). The [iWh]-feature of the wh-phrase in (60) agrees with the Q-feature of C, while its noun class features value [uφ] of C and trigger overt agreement on the verb when the verb moves to C.

The Agree-relation between a PROBE P and a GOAL G is subject to *Locality*: if there are two (or more) potential GOALS that match the PROBE, then only the one that is *closest* to the PROBE can agree with the latter. ''Closeness'' is defined as in (61) in Chomsky (2000: 122):

(61)   *Locality*: D(P) is the c-command domain of P, and a matching feature G is closest to P if there is no G' in D(P) matching P such that G is in D(G').

According to (61), if the PROBE c-commands two potential GOALS, then the GOAL which (asymmetrically) c-commands the other is closer to the PROBE:

(62)

P

G₁

G₂
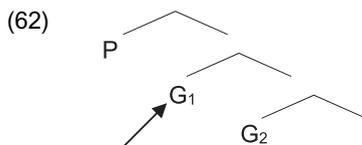
G₁ is closer to

P than G₂

Locality explains, for example, the so-called superiority effect in (63):

(63)  a.  *What did who read ~~what~~?
      b.  Who ~~who~~ read what?

(63a) and (63b) are multiple wh-questions, in which both the subject and the object are wh-phrases. The [iWh]-feature of each wh-phrase is a matching GOAL for the Q-feature of C. However, (63a) shows that movement of a wh-object across a wh-subject is not possible. This fact follows from Locality: since the subject c-commands the object, its [iWh]-feature is closer to the PROBE of C than the [iWh]-feature of the object. Therefore, only the wh-subject can agree with the Q-feature of C and be attracted by the EPP-feature associated with wh-C in English, (63b).

   Notice that wh-movement of the object is possible when the subject is not a wh-phrase, as in example (58) above, where the subject is the DP *John*. This follows from the fact that this DP does not have a [iWh]-feature and therefore does not count as a GOAL for Q in C. Even though the subject in (58) asymmetrically c-commands the wh-object, it does not intervene in terms of Locality, and the wh-object can move to [Spec, C] across the DP *John*.

   In the next section I suggest that the agreement asymmetry observed in DRD-constructions in Zulu is another instance of a superiority effect.

### 5.2. Right dislocation and antifocus features

   Buell (2008), Cheng and Downing (2009) and Zeller (2012) provide evidence that right-dislocated DPs in Zulu are in a $v$P-external position which is relatively low in the structure. For example, (64) shows that dislocated DPs typically appear to the left of manner adverbs such as *kakhulu*, 'a lot', which are located higher in the structure than the VP-adverbs discussed in Section 2, but still below temporal adverbs:

(64)  U-John        u-ya-zi-siz-a              i-zin-gane      za-khe        kakhulu.
      AUG-1a.John    1.SM-DIS-10.OM-help-FV     AUG-10-child     10.POSS-his    a.lot
      'John helps them a lot, his children.'

[Zeller, 2012: 223]

Therefore, Adams (2010), Cheng and Downing (2009) and Zeller (2012) suggest that right-dislocated elements are right-adjoined to $v$P. However, this account does not explain why right dislocation is associated with object marking in Zulu. In order to capture the correlation between object dislocation and object agreement, I therefore adopt an alternative proposal made in Buell (2008) and assume that dislocated objects move to the right-branching specifier of a functional projection immediately above $v$P. In (65), I simply label this category "XP":

(65)
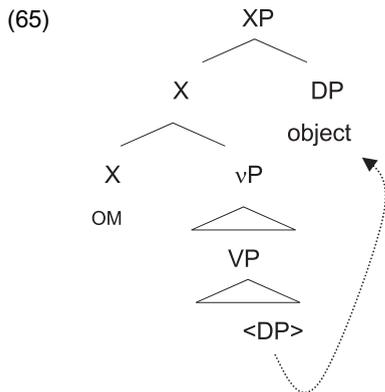


(65) shows that a right-dislocated object agrees with the head of X, and that this agreement relation is spelled-out as the object marker. The object marker combines with the verb when the verb moves to X via $v$.

   Buell (2008) assumes that XP in (65) is a TopP ("topic phrase"). However, Cheng and Downing (2009) show that right-dislocated objects in Zulu cannot function as discourse topics, which means that right dislocation is not simply topic movement. Since it is responsible for object agreement, XP in (65) also resembles the category Agr-O, first introduced into the phrase structure by Pollock (1989) in order to capture effects of short verb movement and object agreement in French. The existence of an Agr-O-category on top of $v$P has been adopted in various studies of object agreement

in Bantu (see e.g. Woolford, 2000; Riedel, 2009). However, as I show below, reducing XP to the formal function of agreement cannot explain the symmetrical properties of (simple) right dislocation in Zulu. I therefore remain agnostic about the categorial status of XP in this paper.

I assume that object right dislocation in Zulu is the result of an Agree relation between an uninterpretable feature of X and a corresponding interpretable feature of the dislocated DP. As just noted, right-dislocated DPs in Zulu cannot function as discourse topics, so the relevant feature is not a Topic feature. However, Sections 2 and 3 demonstrated that right-dislocated DPs in Zulu can never be focused, a property which holds of $v$P-external material in Zulu in general. I now suggest that the inability to be narrowly focused can be grammatically encoded by an interpretable *antifocus* feature [iAF] which is visible to the operations of the computational system (cf. Kallulli, 2000; Ndayiragije, 1999; Zeller, 2008). The [iAF]-feature in Zulu can be associated with material in narrow syntax; at LF, a phrase with an antifocus feature is incompatible with narrow focus and interpreted as given.

To capture the correspondence between dislocation and antifocus, I further propose that the category X in (65) bears an uninterpretable antifocus feature [uAF] which acts as a PROBE searching for a suitable GOAL in its c-command domain. The projection of X is optional, but when X is part of the syntax, it will need to agree with [iAF] of a $v$P-internal phrase. X also has an EPP-feature; therefore, the constituent marked as [iAF] will be attracted by X and move out of $v$P. Object right dislocation is therefore the consequence of an Agree-relation between [uAF] of X and a phrase marked as [iAF], which explains why right-dislocated elements can never be focused.

X also has a set of uninterpretable $\varphi$-features, but importantly, I assume that these features are parasitic on [uAF] and do not act as PROBES. In this respect, X is like agreeing wh-C in Bantu languages such as Kilega, which has an uninterpretable Q-feature as well as $\varphi$-features (see Section 5.1). [u$\varphi$] of X can only be valued if its [uAF] enters an Agree-relation with [iAF] of a category which also has [i$\varphi$]; i.e. noun class features. Consequently, only right-dislocated DPs and certain CPs in Zulu can trigger object agreement.

On the basis of this proposal, I now return to object marking in Zulu DRD-constructions. In these constructions, both DPs are marked as [iAF]. This means that both objects count as potential GOALS for [uAF] of X. Importantly, it is a standard assumption in the Bantu literature that the beneficiary/goal argument asymmetrically c-commands the theme inside the VP (cf. Halpert, 2012; Marantz, 1993; McGinnis, 2000; Ngonyani and Githinji, 2006; Riedel, 2009). Therefore, the definition of Locality in (61) determines that only the beneficiary/goal can agree with and be attracted by X, since it is the closest GOAL for [uAF]. As a consequence, it will always be the beneficiary/goal which agrees with [uAF] of X in DRD-constructions.

I assume that in DRD-construction, *all* material marked as [iAF] needs to vacate the $v$P. In fact, this requirement may even be of a more general nature: Buell (2008, 2009) and Cheng and Downing (2009) show that there is a strong preference in Zulu to remove all non-focused material from the $v$P. Speakers may tolerate a phrase marked as [iAF] inside $v$P, but it seems that this possibility only exists when another $v$P-internal constituent can be clearly identified as narrow focus (e.g. by virtue of being a wh-phrase in the IAV-position). In DRD-constructions, both DPs are marked as [iAF], and since there is no focused material in VP, both DPs must move.[14] However, the head of XP hosts only one [uAF]- and one EPP-feature in Zulu, and XP provides only one specifier for right-dislocated objects (but see footnote 15 for an alternative). This means that, once the [uAF]-feature of X has been deleted under Agree with [iAF] of the beneficiary/goal, the [iAF]-feature of the theme-DP cannot enter into an Agree-relation with a higher PROBE. Therefore, the only way that the [iAF]-marked theme can be removed from the $v$P is via adjunction to a higher maximal projection, a last-resort operation that is only available if movement to [Spec, X] is not possible. This means that in DRD-constructions, the beneficiary/goal argument triggers object agreement and moves to [Spec, X], while the theme is dislocated by right-adjoining to either $v$P or XP:

---

[14] I assume that the requirement to remove non-focused DPs from $v$P in Zulu is independent of the feature-driven movement triggered by X's EPP-feature, and may follow from general syntax-semantics interface conditions. For example, on the assumption that [iAF]-marked DPs are generalised quantifiers, movement may be necessary in order to resolve a type mismatch (cf. the "Survive" principle of Stroik, 2009 and its application in Lechner, 2009). Alternatively, the obligatory dislocation of all non-focused material in DRD-constructions specifically may be a consequence of the auxiliary focus interpretation typically associated with these constructions (see footnote 8). Interestingly, Hyman and Watters (1984) show that in the Bantu language Kirundi, auxiliary focus is expressed by the disjoint form of the verb (cf. Meeussen, 1959; Ndayiragije, 1999). The same may be the case in Zulu, but recall that the choice of the disjoint form in Zulu also depends on constituency: the disjoint form of the verb cannot be followed by $v$P-internal material (see Section 2). Therefore, dislocation of all $v$P-internal material may be required in Zulu to create the syntactic environment in which the morphological exponent of auxiliary focus is licensed.

(66)
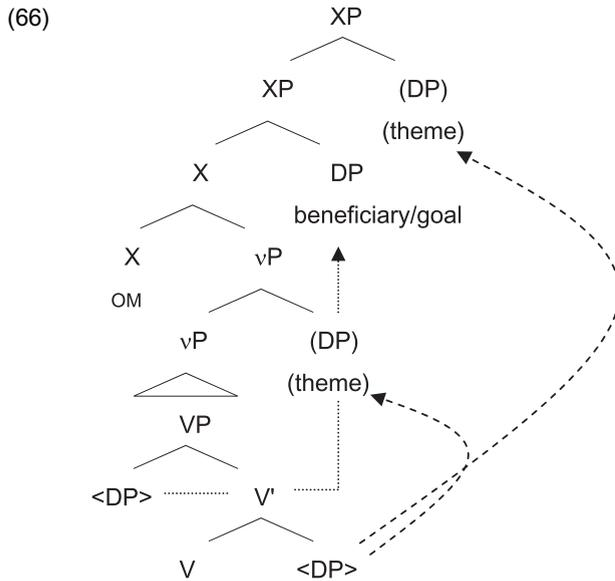


The adjunction-analysis in (66) explains why the theme can both follow and precede the beneficiary/goal in DRD-constructions, and why theme dislocation does not have a morphological reflex in Zulu.

The *Constraint on Word-Internal Encoding of Arguments* proposed in (49) in Section 4 stipulated that thematic prominence relations only determine the agreement properties of dislocated arguments in Zulu. The analysis outlined above explains this aspect of (49) by assuming that (i) dislocated DPs have [iAF]-features; and (ii) only [iAF]-features are GOALS for [uAF] on X. Everything else follows from Locality and the assumption that thematic prominence relations are syntactically represented through asymmetrical c-command relations: the theme can never be object-marked in DRD-constructions, because Locality prevents it from agreeing with X when the syntactically higher beneficiary/goal-DP is also marked as [iAF]. This asymmetrical agreement pattern of DRD-constructions is simply another example of a superiority effect. However, Locality is only evoked when there is more than one matching GOAL for a particular PROBE. In sentences in which only one of two objects is marked as antifocus, the [iAF]-feature of this object is the only matching GOAL for the [uAF]-feature of X, and this object-DP is hence the only candidate for object agreement and right dislocation to [Spec, X]. Therefore, when the beneficiary/goal is not marked as [iAF], it can be skipped by a right-dislocated theme-DP, for the same reason that a wh-object can move across a non-wh-subject in simple wh-constructions (see Section 5.1).

This account has an important implication for the standard treatment of object agreement in Bantu languages. In most theories, object marking is analysed as a PROBE-GOAL relation between the *φ-features* of a functional head and the object-DP (see e.g. Baker, 2008; Henderson, 2006; Riedel, 2009). However, the existence of Bantu languages such as Zulu, which allow object marking and dislocation of either object of a double object construction, raises a serious problem for an analysis of object marking in terms of φ-feature agreement. Since the beneficiary/goal asymmetrically c-commands the theme in double object constructions and both objects have interpretable φ-features, we would expect that the theme can *never* be object-marked and right-dislocated in Zulu, because the φ-features of the beneficiary/goal are closer to the [uφ]-features of X. But right dislocation of, and agreement with, the theme are possible in constructions in which the beneficiary/goal remains inside the νP. In a theory which treats object marking in Bantu in terms of PROBE-GOAL relations between φ-features, symmetrical object marking constitutes a violation of Locality.

This problem has been recognised in the literature. One suggestion which has been offered as a solution is that Locality principles are parameterised and simply do not apply in symmetrical Bantu languages (cf. Baker and Collins (2006) and Riedel (2009) for proposals along these lines). However, this approach cannot account for the properties of Zulu, in which object agreement is *symmetrical* in simple right dislocation constructions, but *asymmetrical* in DRD-constructions. Another idea that has been put forward is that in symmetrical languages, the theme can optionally undergo νP-internal movement across the beneficiary/goal, which reverses the c-command relations between the two objects and brings the theme closer to the PROBE (see e.g. McGinnis, 2000). This alternative faces the same problem as the previous approach. Moreover, it makes the wrong predictions regarding the basic word order of Zulu. Many symmetrical Bantu languages (such as e.g. Haya, Kinande and Kinyarwanda) do allow both the word order ben/goal > pt/th and pt/th > ben/goal in double object constructions, without any object marking. This word order flexibility is predicted in languages in which the theme is indeed allowed to leapfrog the beneficiary/goal. However, as was shown in examples (16) and (17) in Section 2.2, Zulu does not allow the theme to precede the beneficiary/goal (unless the latter is object-marked). The fixed

word order of Zulu and the asymmetrical agreement properties of DRD-constructions strongly suggest that right dislocation and agreement are controlled by Locality in this language. The fact that double object constructions in which the theme is object-marked are nevertheless possible therefore implies that the features responsible for right dislocation and object agreement are not φ-features, which are inherently associated with all DPs, but features that are only associated with dislocated objects.

The discussion of the Locality-analysis of DRD presented in this section has focused on DRD-constructions with a beneficiary/goal and a theme argument. However, note that this analysis also accounts for the agreement properties of DRD-constructions in which the dislocated arguments have different thematic properties. As was shown in Section 4, in sentences in which a theme and a *locative* argument are both dislocated, the former can agree with the verb in Zulu (see (56) above). This follows because the thematically less prominent locative argument is represented syntactically in a position below the theme (see e.g. Baker and Collins, 2006; Riedel, 2009). Therefore, in constructions in which both the theme and the locative bear an [iAF]-feature, the theme can trigger object agreement, because the locative does not c-command the theme and therefore does not count as an intervenor in terms of Locality.

### 5.3. Locality and subject movement

A problem for an analysis of DRD-constructions based on Locality is posed by the base position of the external argument (EA), which originates in the specifier of *v*P. In right dislocation constructions, the EA moves out of the *v*P (to [Spec, T]) and is typically interpreted as given, which suggests that it is also marked as [iAF]. However, the EA asymmetrically c-commands the two objects inside the VP:

(67)

```
                    XP
                  /    \
            X[uAF]      vP
                      /    \
        EA →  DP[iAF]       v
                          /    \
                        v       VP
                              /    \
                        DP[iAF]     V'
                                  /    \
                                 V      DP[iAF]
```
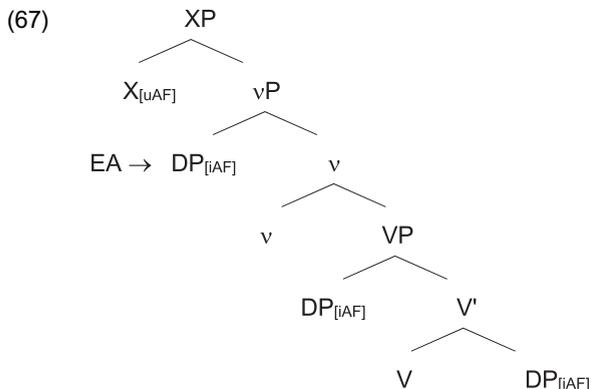
In a configuration such as (67), object right dislocation is predicted to be blocked by Locality, because the EA is closer to X than any VP-internal DP. Paradoxically, object right dislocation is nevertheless possible, but at the same time constrained by Locality. Although the [uAF]-feature of X can only agree with the closest GOAL, it simply does not "see" the subject when probing its domain.

A solution to this paradox is provided by the fact that a non-focused EA does not remain in [Spec, *v*], but moves to [Spec, T]. Since copies of moved elements are not relevant for Locality (see Chomsky, 2000), the assumption that X probes only *after* the subject has moved to [Spec, T] would explain why subjects are not intervenors for object right dislocation. I therefore suggest that something like the following principle is responsible for the "invisibility" of the EA in (67):

(68)    The "T Always Probes First" principle (TAPF)
        The first *v*P-external PROBE-GOAL relation in a derivation must involve the uninterpretable features of T.

If the EA provides a matching GOAL for the PROBE of T (whose precise nature is discussed in Section 5.4), then the two will agree, and T's EPP-feature will attract the EA to [Spec, T]. According to the TAPF, these operations must take place before functional heads below TP can probe the *v*P. The TAPF is a stipulation, but it is necessary to account for the fact that movement of the EA to the preverbal subject position bleeds probing of this DP by lower heads. Notice that something like the TAPF is already assumed elsewhere in the literature on Bantu. For example, Halpert (2012) motivates the existence of a functional head L (for *Licenser*) in Zulu which selects *v*P and which can assign Case to *v*P-internal DPs. Crucially, Halpert argues that L probes the *v*P only *after* the subject has already moved out of the *v*P. Riedel (2009) makes the same assumption (although implicitly) in her analysis of object agreement in terms of a category Agr-O above *v*P.

I therefore conclude that the postulation of something like the TAPF is indeed required to explain why subject-DPs that move out of $v$P are not visible to probing heads below T.[15]

### 5.4. The passive

As was shown in Section 4, Zulu allows for passivisation of a theme-DP across an intervening beneficiary/goal if the latter remains in VP. However, if both internal arguments are removed from the $v$P in a passive construction, only the beneficiary/goal can become the subject, while the theme-DP is right-dislocated and triggers object agreement. In light of the analysis of DRD-constructions presented in Section 5.2, this contrast suggests that subject agreement and movement to the preverbal subject position [Spec, T] are also consequences of antifocus agreement. I therefore submit that T in Zulu is like X in that its probing feature is [uAF]; although T also has [uφ]-features, these features do not probe T's c-command domain.

This claim contradicts the standard assumption in the Minimalist Program, which holds that movement of a subject-DP to [Spec, T] is a consequence of φ-feature agreement between T and the DP. However, the existence of symmetrical passives in Zulu raises the same Locality problem for a φ-feature-based account as symmetrical object agreement. If the PROBE of T was [uφ], then the interpretable φ-features of the beneficiary/goal would always be the closest GOAL, and theme passivisation should be ruled out. This Locality problem can perhaps be solved by stipulation, but whatever mechanism is introduced to explain why a probing [uφ]-feature of T can agree with a theme-DP across a beneficiary/goal in Zulu will then fail to predict the asymmetrical properties of passive constructions in which both internal arguments move out of the VP. The fact that the theme can no longer become a subject in these constructions would remain a mystery.

However, if the probing feature of T is [uAF], then the properties of passive constructions in Zulu follow directly. Since only [iAF]-features count as GOALS, theme passivisation is predicted to be possible whenever the beneficiary/goal is not marked as antifocus (and hence remains in the VP), because in these constructions, the theme-DP is the only matching GOAL for [uAF] on T. In contrast, when both the beneficiary/goal and the theme are marked as [iAF], the features of both DPs count as potential GOALS for [uAF] of T. X projects in these constructions as well; therefore, both DPs are also probed by [uAF] of X. However, the TAPF stipulates that [uAF] of T will probe first. Locality now dictates that only the [iAF]-feature of the hierarchically higher argument – the beneficiary/goal – can agree with [uAF] on T. Therefore, it will always be the beneficiary/goal which moves to [Spec, T] to become the subject; Agree between [uAF] of T and the theme-DP is blocked. Once the beneficiary/goal has moved to [Spec, T], [uAF] of X will probe. Since the copy of the moved beneficiary/goal-DP does not count for Locality, the PROBE can locate the theme, whose [iAF] now agrees with [uAF] of X. The theme-DP values X's [uφ]-features, triggering object agreement, and is right-dislocated to [Spec, X].

According to this proposal, T is similar to X in that its PROBE is [uAF], and not [uφ]. In Section 5.3, I have suggested that X's φ-features are parasitic on [uAF]; they are valued by whichever category enters an Agree-relation with [uAF] of X. At first sight, it seems that the same holds for the φ-features of T. As is well-known, agreeing subjects in Zulu cannot be narrowly or contrastively focused, and wh-subjects never license subject agreement (see Buell, 2008; Cheng and Downing, 2009; Zeller, 2008, and examples (11b) and (12b) above, repeated in (69) for convenience). This suggests that subject agreement in Zulu, like object agreement, is correlated with antifocus:

(69)  a.  *U-Sipho        kuphela  u-fik-ile.
          AUG-1a.Sipho   only       1.SM-arrive-PAST.DIS
          Intended: 'Only Sipho arrived.'
      b.  *U-bani          u-sebenz-ile?
          AUG-1a.who     1.SM-work-PAST.DIS
          Intended: 'Who worked?'

However, there is reason to doubt that the φ-features of T are parasitically associated with its probing [uAF]-feature. As the examples in (70) and (71) show, φ-features of T are in fact licensed in sentences with focused subjects:

---

[15] One problem with the TAPF is that it produces acyclic derivations whenever T c-commands another PROBE above $v$P. This problem is perhaps less severe in representational theories (cf. e.g. Brody, 1995) or Minimalist theories that incorporate the concept of a phase (Chomsky, 2000, 2001), but it remains a theoretically unappealing aspect of the analysis proposed here. An anonymous reviewer therefore suggests an alternative analysis of dislocation which is based on the idea that X may carry multiple occurrences of [uAF] and project multiple specifiers. Every DP marked as [iAF] would then be attracted to [Spec, X]. The EA would be the first DP to move, and object-DPs would tuck in below the EA. The resulting hierarchical order of X's specifiers would then explain why it is the EA that agrees with T and moves to [Spec, T] after T is merged. However, the problem with this analysis is that it can no longer explain the agreement properties of dislocation constructions. Since the EA is the first DP that agrees with X, it is predicted that X's φ-features are valued by the φ-features of the EA; the EA would hence determine both subject and object agreement on the verb. In light of this problem, I have not adopted the reviewer's alternative proposal in this paper, although I consider it worth examining in future research.

(70)    Ku-hlek-e              i-n-gane.
        17.EXPL-laugh-PAST  AUG-9-child
        'It is the child who laughed.', or: 'There is a child laughing.'

(71)    Ngi-fun-a    u-Sipho        kuphela  ukuthi  a-phek-e          i-qanda.
        1S-want-FV  AUG-1a.Sipho  only       that     1.SM-cook-SUBJ  AUG-5.egg
        'I want only Sipho to cook an egg.'

(70) is an expletive construction in which the subject appears postverbally and is (contrastively or presentationally) focused. T in (70) thus lacks an [uAF]-feature and has not probed the in situ subject; nevertheless, its φ-features are present, and valued by an expletive *pro* of class 17 which is merged in [Spec, T]. In (71), the subject of the embedded subjunctive clause *uSipho* has undergone Raising-to-object (RtO) into a position inside the main clause *v*P (Halpert, 2012; Halpert and Zeller, to appear). In this position, the raised subject-DP can be modified by a focus marker, but nevertheless is able to trigger subject agreement in the embedded clause. The data in (70) and (71) hence raise a problem for the idea that the φ-features of T are parasitic on a probing [uAF]-feature.[16]

I therefore assume that [uφ]-features are inherently associated with T, regardless of whether T also has an [uAF]-feature, and that they must be valued by a category with interpretable φ-features. Importantly, however, I assume that [uφ] of T, in contrast to [uAF], does not probe its c-command domain. Rather, I follow Baker (2008) in assuming that subject agreement in Zulu, as well as in many other Bantu languages, is established by [uφ] of T probing "upward", which implies that T's [uφ]-features can only be valued by a c-commanding element. In SVO-clauses with preverbal subjects, [uAF] and [uφ] of T work in tandem: T's [uAF]-feature finds the closest [iAF]-DP in its c-command domain, and its EPP-feature will attract this DP to [Spec, T]. From here, the DP c-commands T and therefore values T's uninterpretable φ-features, creating the impression of antifocus agreement (cf. Zeller, 2008). However, when T does not have [uAF], its φ-features still have to be valued by a c-commanding DP. In (70), this DP is expletive *pro* in [Spec, T]; in (71), it is the raised subject inside the matrix *v*P, which c-commands the embedded T and triggers subject agreement. Notice that it is not necessary to assume that the raised subject-DP in (71) has moved into the matrix clause via the embedded [Spec, T]. Rather, it is possible that RtO in (71) raises the embedded subject directly from its base position inside the embedded *v*P to the matrix *v*P, from where it c-commands the embedded T and triggers subject agreement. If this is indeed the case, then it is possible to maintain the assumption that movement to [Spec, T] is correlated with antifocus by assuming that the EPP-feature which attracts a constituent to [Spec, T] is associated with T if and only if T also has a probing [uAF]-feature.

In sum, I propose that, although the φ-features of T in Zulu are typically valued by an [iAF]-marked subject-DP in [Spec, T], they can also be valued by a different c-commanding element (an expletive or a raised subject) which is not necessarily marked as antifocus. However, the sole "downward" probing feature of T is [uAF].[17] Therefore, the parallels between DRD and passivisation follow from the idea that both of these constructions in Zulu involve PROBE-GOAL relations between [uAF] and [iAF].

---

[16] I thank an anonymous reviewer for making me aware of the problem raised by (70) and (71). The reviewer also states that sentences with agreeing subjects and SVO word order can sometimes be used as answers to subject questions in Zulu. However, even if this is correct, I do not believe that this observation challenges the assumption that agreeing subjects are marked as antifocus. É. Kiss (1998) draws a distinction between *identificational* and *information* focus. While identificational focus typically expresses exhaustive identification and corresponds to what is traditionally characterised as "narrow focus" (including focus on wh-phrases) or "contrastive focus", information focus merely expresses what is new (not presupposed) in a sentence. If agreeing subjects in Zulu are indeed licensed in answers to subject questions, even though they are incompatible with narrow and contrastive focus, then this suggests that an antifocus feature marks the subject as incompatible with identificational focus, leaving open the possibility that an agreeing subject can provide new information focus. It should be noted, however, that according to Cheng and Downing (2007, 2009), answers to subject questions require clefts in Zulu, and to the best of my knowledge, agreeing objects are never possible as answers to object questions.

[17] The assumption that T's PROBE is [uAF] raises questions about transitive constructions in which the subject is focused and hence not a GOAL for T. As an anonymous reviewer points out, my analysis seems to predict that in these constructions, a non-focused (= [iAF]) object can agree with [uAF] of T and move past a focused subject-DP, which remains *in situ*. This would derive the OVS-word order of so-called subject-object reversal constructions, which exist in Bantu languages such as Kinyarwanda or Kinande, but not in Zulu. However, I believe that OVS-constructions in Zulu are excluded for independent reasons which have to do with the special status of constructions with *v*P-internal subjects. In these constructions, the *v*P is generally opaque for probing from the outside (see Zeller, 2013 for discussion and analysis of this fact). Therefore, a *v*P-internal [iAF]-feature cannot be probed by a functional head outside *v*P when the subject is focused and in situ. As a result, T cannot host an [uAF]-feature in these constructions (although it still has φ-features, which are valued by an expletive, as noted in the text), and non-focused object-DPs have to remain in the *v*P in Zulu, giving rise to transitive expletive constructions (TECs). Notice that TECs are marked for some Zulu speakers, presumably because these speakers do not tolerate elements with [iAF]-features inside the *v*P (see Section 5.2).

## 5.5. *Dislocation and the A-/A-bar distinction*

I have argued that the ''downward'' probing features of T and X are not φ-features, but uninterpretable antifocus features. Only interpretable antifocus features can therefore act as GOALS, and a DP without [iAF] never counts as an intervenor in terms of Locality. In this respect, I have likened right dislocation and movement to the subject position in Zulu to wh-movement, which involves a PROBE-GOAL relation between a Q-feature of C and the [iwh]-feature of a wh-phrase. Like the PROBE-GOAL relation between antifocus features, agreement between Q and [iwh] can be established across an intervening constituent, as long as the latter is not a potential GOAL for the PROBE (i.e. not a wh-phrase). However, since wh-movement is A-bar movement, the question that arises from the parallel established by my analysis is whether object right dislocation and movement to [Spec, T] in Zulu should also be regarded as instances of A-bar movement.

As far as object dislocation in Zulu is concerned, such a claim could probably be defended and has indeed been made in the literature (see e.g. Van der Spuy, 1993; see also Zeller, 2009 for left dislocation). However, analysing subject movement to [Spec, T] as A-bar movement would be a more daring proposal. Although it has occasionally been proposed that preverbal subjects occupy A-bar positions in Bantu, these subjects are typically analysed as dislocated topics linked to null pronominals in A-positions (see e.g. Baker, 2003; Henderson, 2006; Letsholo, 2002; Schneider-Zioga, 2007). I am not aware of any study which claims that movement of the subject to [Spec, T] constitutes A-bar movement in Bantu languages. Notice that such a claim would be incompatible with the way the A-/A-bar distinction is defined in more recent versions of the Minimalist Program: according to Chomsky (2007), A-bar movement is driven by edge (= EPP-) features of phase heads, but in contrast to C, T is not a phase head, so movement to [Spec, T] would not count as A-bar movement from this perspective, regardless of the nature of the probing feature.

At the same time, Chomsky (2007) defines A-movement as movement driven by uninterpretable inflectional features (i.e. φ-features). I have argued that the probing features behind right dislocation and movement to the subject position in Zulu are not the φ-features of T and X, but antifocus features. This means that dislocation to [Spec, T] and [Spec, X] in Zulu cannot be regarded as a typical instance of A-movement either. However, recall that the φ-features of X and T are still valued when an Agree-relation is established between [uAF] of X or T and [iAF] of a DP. I have captured this fact through the assumption that the [uφ]-features of X are ''parasitic'' on [uAF], while the φ-features of T probe upwards. However, an alternative way of expressing the relation between antifocus and φ-feature valuation would be to assume that the [uφ]-features of T and X do indeed probe downwards, but that the [iφ]-features of a DP can only act as a potential GOAL if this DP also has an antifocus feature. According to this approach, the role of an [iAF]-feature in Zulu would be to *activate* the GOAL and to make it visible for a higher PROBE; the [iφ]-features of a DP without [iAF] would be inactive and incapable of agreeing with [uφ] of a c-commanding head. Antifocus features in Zulu would hence fulfil a function similar to that of uninterpretable Case features in languages such as English. Such an approach would still capture the key idea that only DPs with interpretable antifocus features can enter Agree-relations in Zulu and act as intervenors in terms of Locality, but right dislocation and movement to [Spec, T] could now be analysed as A-movement, because the probing features would be the φ-features of T and X.

Such a view raises many questions, and for reasons of space, I do not explore this conceptual alternative further, but I consider it a possible way of reconciling the analysis proposed in this paper with an A-movement analysis of subject movement and right dislocation. The aim of this brief discussion is to show that the Locality-account developed in this section does not automatically lead to the conclusion that these displacement operations in Zulu are instances of A-bar movement. Rather, I believe that this issue requires further empirical analysis. The properties of dislocation to [Spec, T] and [Spec, X] in Zulu have to be examined in the light of standard diagnostics for A- and A-bar-movement (does dislocation show crossover effects? do dislocated elements reconstruct at LF? does dislocation create new Binding relations? etc.), and it has to be established how these movement operations interact with other attested types of movement in Zulu, such as raising or relative operator movement. However, since such a task goes far beyond the scope of this paper, I have to leave this question about the nature of the movement operations associated with subject and object agreement in Zulu as a topic for future research.

## 6. Conclusion

The symmetrical Bantu language Zulu exhibits unexpected asymmetrical object agreement properties in constructions in which the beneficiary/goal and the theme argument of a ditransitive verb are dislocated. In these ''double right dislocation'' (DRD) constructions, only the beneficiary/goal, but not the theme, can agree with the verb, although Zulu otherwise allows for object marking of theme-DPs in double object constructions. In this paper, I have argued that this asymmetry follows from the asymmetrical syntactic relation between VP-internal arguments (which represents their thematic prominence ranking) and syntactic Locality conditions that constrain agreement relations between *v*P-internal DPs and *v*P-external functional heads. Since the beneficiary/goal argument is closer to the probing head responsible for

object agreement than the theme, Locality determines that in the relevant DRD-constructions, object agreement can only be with the beneficiary/goal.

However, in contrast to DRD-constructions, object agreement with the theme is possible in double object constructions in which the beneficiary/goal is not dislocated. The conclusion that I have drawn from this contrast is that the interpretable feature of object-DPs, which serves as a GOAL and allows them to enter an Agree-relation with the PROBE of the object agreement-head, is the same feature that is also responsible for dislocation. When this feature, which I have labelled ''antifocus'', is associated with both the beneficiary/goal and the theme, then both DPs will be dislocated, but in this case, both DPs also compete for object agreement, and the sole winner of this competition is the beneficiary/goal, as determined by Locality. In contrast, when only the theme is marked as antifocus, this feature is the only available GOAL, and consequently, the theme can agree in these constructions, because the beneficiary/goal is not an intervenor in terms of Locality. A consequence of this analysis is that the process of object marking in Zulu cannot be explained solely in terms of φ-feature-agreement. The feature that allows a DP to enter an object agreement relation in Zulu is not inherently associated with every DP by virtue of its categorial specification, but only appears on DPs that are interpreted as given and that are, as a consequence of this property, removed from the VP.

## Acknowledgments

## References

Adams, N., 2010. The Zulu Ditransitive Verb Phrase (PhD-thesis). The University of Chicago.
Alsina, A., 1996. Passive types and the theory of object asymmetries. Nat. Lang. Linguist. Theory 14 (4), 673–723.
Alsina, A., Mchombo, S.A., 1993. Object asymmetries and the Chichewa applicative construction. In: Mchombo, S.A. (Ed.), Theoretical Aspects of Bantu Grammar. CSLI Publications, Stanford, pp. 11–44.
Baker, M., 2003. Agreement, dislocation, and partial configurationality. In: Carnie, A., Harley, H., Willie, M.A. (Eds.), Formal Approaches to Function in Grammar: in Honor of Eloise Jelinek. John Benjamins, Amsterdam, pp. 107–132.
Baker, M., 2008. The Syntax of Agreement and Concord. Cambridge University Press, Cambridge.
Baker, M., Collins, C., 2006. Linkers and the internal structure of vP. Nat. Lang. Linguist. Theory 24, 307–354.
Bosch, S.E., 1985. Subject and Object Agreement in Zulu (MA dissertation). University of Pretoria.
Bresnan, J., Mchombo, S.A., 1987. Topic, pronoun, and agreement in Chicheŵa. Language 63, 741–782.
Bresnan, J., Moshi, L., 1990. Object asymmetries in comparative Bantu syntax. Linguist. Inq. 21 (2), 147–181.
Brody, M., 1995. Lexico-Logical Form. The MIT Press, Cambridge, MA.
Buell, L., 2005. Issues in Zulu Verbal Morphosyntax (Ph. D. thesis). University of California at Los Angeles.
Buell, L., 2006. The Zulu conjoint/disjoint verb alternation: focus or constituency? In: Downing, L., Marten, L., Zerbian, S. (Eds.), Papers in Bantu Grammar and Description (ZAS Papers in Linguistics 43). ZAS, Berlin, pp. 9–30.
Buell, L., 2008. VP-internal DPs and right-dislocation in Zulu. In: van Koppen, M., Botma, B. (Eds.), Linguistics in the Netherlands 25. John Benjamins, Amsterdam, pp. 37–49.
Buell, L., 2009. Evaluating the immediate postverbal position as a focus position in Zulu. In: Matondu, M., et al. (Eds.), Selected Proceedings of the 38th Annual Conference on African Linguistics. Cascadilla Proceedings Project, Somerville, MA, pp. 166–172.
Buell, L., 2012. Class 17 as a non-locative noun class in Zulu. J. Afr. Lang. Linguist. 33, 1–35.
Carstens, V., 2005. Agree and EPP in Bantu. Nat. Lang. Linguist. Theory 23, 219–279.
Cheng, L., Downing, L.J., 2007. The prosody and syntax of Zulu relative clauses. SOAS Work. Pap. Linguist. 15, 51–63.
Cheng, L., Downing, L.J., 2009. Where's the topic in Zulu? Linguist. Rev. 26, 207–238.
Chomsky, N., 1995. The Minimalist Program. The MIT Press, Cambridge, MA.
Chomsky, N., 2000. Minimalist inquiries: the framework. In: Martin, R., Michaels, D., Uriagereka, J. (Eds.), Step by Step. The MIT Press, Cambridge, MA, pp. 89–155.
Chomsky, N., 2001. Derivation by phase. In: Kenstowicz, M. (Ed.), Ken Hale. A Life in Language. The MIT Press, Cambridge, MA, pp. 1–52.
Chomsky, N., 2007. Approaching UG from below. In: Sauerland, U., Gärtner, H.-M. (Eds.), Interfaces + Recursion = Language? Mouton de Gruyter, Berlin, pp. 1–29.
De Guzman, V., 1987. Indirect objects in Siswati. Stud. Afr. Linguist. 18 (3), 309–325.
Halpert, C., 2012. Argument Licensing and Agreement in Zulu (Ph. D. thesis). Massachusetts Institute of Technology.
Halpert, C., Zeller, J., to appear. Right dislocation and raising-to-object in Zulu. Linguist. Rev.
Henderson, B., 2006. The Syntax and Typology of Bantu Relative Clauses (Ph. D. -dissertation). University of Urbana-Champaign.
Hyman, L.M., Watters, J.R., 1984. Auxiliary focus. Stud. Afr. Linguist. 15, 233–273.

Kallulli, D., 2000. Direct object clitic doubling in Albanian and Greek. In: Beukema, F., den Dikken, M. (Eds.), Clitic Phenomena in European Languages. John Benjamins, Amsterdam, pp. 209–248.

Kinyalolo, K.K., 1991. Syntactic Dependencies and the Spec-Head Agreement Hypothesis in KiLega (Ph. D. thesis). University of California at Los Angeles.

É Kiss, K., 1998. Identificational focus versus information focus. Language 74 (2), 245–273.

Lechner, W., 2009. Evidence for survive from covert movement. In: Putnam, M. (Ed.), Towards a Derivational Syntax. Survive Minimalism. John Benjamins, Amsterdam, pp. 231–254.

Letsholo, R., 2002. Syntactic Domains in Ikalanga (Ph.D. thesis). University of Michigan.

Marantz, A., 1993. Implications of asymmetries in double object constructions. In: Mchombo, S.A. (Ed.), Theoretical Aspects of Bantu Grammar. CSLI Publications, Stanford, pp. 113–148.

Marlo, M.R., to appear. On the number of object markers in Bantu languages. J. Afr. Lang. Linguist.

Marten, L., Kula, N.C., Thwala, N., 2007. Parameters of morphosyntactic variation in Bantu. Trans. Philol. Soc. 105, 253–338.

McGinnis, M., 2000. Phases and the syntax of applicatives. In: Kim, M.-J., Strauus, U. (Eds.), Proceedings of NELS 31. University of Massachusetts, GLSA, Amherst, pp. 333–349.

Meeussen, A.E., 1959. Essai de grammaire Rundi. Annales du Musée Royal du Congo Belge, Série Sciences Humaines No. 24, Tervuren.

Ndayiragije, J., 1999. Checking economy. Linguist. Inq. 30 (3), 399–444.

Ngonyani, D., Githinji, P., 2006. The asymmetric nature of Bantu applicative constructions. Lingua 116, 31–63.

Pollock, J.-Y., 1989. Verb movement, universal grammar, and the structure of IP. Linguist. Inq. 20, 365–424.

Riedel, K., 2009. The Syntax of Object Marking in Sambaa: A Comparative Bantu Perspective (Ph. D. thesis). University of Leiden. LOT dissertation series, Utrecht.

Schneider-Zioga, P., 2007. Anti-agreement, anti-locality and minimality: the syntax of dislocated subjects. Nat. Lang. Linguist. Theory 25 (2), 403–446.

Stroik, T., 2009. Locality in Minimalist syntax. The MIT Press, Cambridge, MA.

Van der Spuy, A., 1993. Dislocated noun phrases in Nguni. Lingua 90, 335–355.

Van der Wal, J., 2009. Word Order and Information Structure in Makhuwa-Enahara (Ph. D. thesis). University of Leiden. LOT dissertation series, Utrecht.

Visser, M.W., 1986. Cliticization and case theory in Xhosa. S. Afr. J. Afr. Lang. 6 (3), 129–137.

Woolford, E., 1995. Why passive can block object marking. In: Akinlabi, A. (Ed.), Theoretical Approaches to African Linguistics (Trends in African Linguistics 1). Africa World Press, Trenton, NJ, pp. 199–215.

Woolford, E., 2000. Agreement in disguise. In: Carstens, V., Parkinson, F. (Eds.), Trends in African Linguistics 4. Africa World Press, Trenton, NJ, pp. 103–117.

Zeller, J., 2008. The subject marker in Bantu as an antifocus marker. StellenBosch Pap. Linguist. 38, 221–254.

Zeller, J., 2009. On clitic left dislocation in Zulu. In: Ermisch, S. (Ed.), Frankfurt African Studies Bulletin 18/2006: Focus and Topic in African Languages. Ruediger Koeppe Verlag, Koeln, pp. 131–156.

Zeller, J., 2012. Object marking in isiZulu. South. Afr. Linguist. Appl. Lang. Stud. 30 (2), 219–235.

Zeller, J., 2013. Locative inversion in Bantu and predication. Linguistics 51 (6), 1107–1146.