

Agreeing objects in Zulu can be indefinite and non-specific

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1. Introduction

In Zulu (Nguni; S.42), as in most other Bantu languages, a verb can be prefixed with a so-called object marker (OM; highlighted in bold). When the OM appears in isolation, as in (1b), it is interpreted anaphorically (i.e. as a pronoun), but when it co-occurs with an agreeing object (in italics), as in (1c), it may affect the interpretation of the object-DP:^{1,2}

- (1a) Ngi-bon-e i-kati.
1SG-see-PST AUG-5.cat
'I saw a cat.'
- (1b) Ngi-li-bon-ile.
1SG-5.OM-see-PST.DJ
'I saw it.'
- (1c) Ngi-li-bon-ile *i-kati*.
1SG-5.OM-see-PST.DJ AUG-5.cat
'I saw the cat.'

A common claim regarding the semantic import of object marking in many Bantu languages, and the one which is the focus of this paper, is that object-marked objects are obligatorily interpreted as *definite* or *specific*. For example, object marking has been linked to definiteness of the agreeing object in Kiluguru (Marten & Ramadhani 2001), Northern Sotho (Mojapelo 2007), Nata (Gambarage 2019), and Chiyao (Taji 2020), and to a specific interpretation of the object-marked DP in Runyankore-Rukiga (Asiimwe 2014), Xhosa (Visser 2008), Kiyaka (Kidima 1987) and Lubukusu (Sikuku & Diercks forthcoming). Moreover, some Bantu languages show differential object marking with objects high on the definiteness scale, such as pronouns, proper names, or definite animates (see e.g. Bresnan & Moshi 1990 for Kichaga; Givón 1976, Kimambo 2018 for Swahili; Hualde 1989 for Nyaturu; Riedel 2009 for Sambaa). Bantu languages have no definite articles, but it seems that at least in some languages, definiteness or specificity of an object-DP are expressed by the OM.

Zulu may also be one of those languages. Bilingual speakers tend to translate object-marked objects into English by using the definite article (compare (1a) and (1c)), in line with Doke's observation (1927/1997: 299) that with the use of the OM in Zulu, "the nearest approach to the significance of the definite article [...] is conveyed". Wald (1979: 510) goes

¹ The abbreviations in the examples follow the Leipzig Glossing Rules. Additional glosses: AUG=augment (initial vowel of nominals); DJ=disjoint verb form; EPEN=epenthetic; FV=final vowel; OM=object marker; SM=subject marker. Numbers before SG or PL represent person, and otherwise noun class.

² Bantu languages show considerable microvariation regarding the morpho-syntax of object marking. Differences exist, for example, with respect to the morphological position of the OM, the number of OMs that can appear on the verb, the syntactic position of the agreeing object (e.g. vP-internal or external), and the object marking possibilities in constructions with more than one object (see e.g. Beaudoin-Lietz, Nurse & Rose 2004; Devos & Guérois 2022; Marlo 2015; Marten & Kula 2012; Riedel 2009, 2022; Sikuku & Diercks forthcoming; Van der Wal 2022 and the references cited in this work for extensive discussion).

further and argues that in Zulu, “definite and indefinite object NPs are distinguished by the use or nonuse of the OM”, and according to Andrason & Visser (2016: 145), “a definite and/or specific interpretation of the object is imposed” when the OM is used. My goal in this article is to examine whether these claims can be corroborated under scrutiny, in which case object marking in Zulu could be regarded as a morpho-syntactic device to mark a DP as definite or specific.

Section 2 describes how the data reported in this article were collected. Section 3 discusses object marking in relation to definiteness in Zulu, and Section 4 focusses on object marking and specificity. The data I present contradict the abovementioned claims about the semantic effects of the OM, by showing that object marking in Zulu is possible in contexts in which the object-DP is clearly indefinite, or even non-specific. Section 5 offers a brief discussion of this result and suggests that the effects of object marking follow from information structure: agreeing objects in Zulu are obligatorily dislocated, and therefore appear outside the focus domain. Section 6 concludes.

2. Method

Based on examples from the literature and the definiteness and specificity tests presented in Dayal (2018, forthcoming) and Carstens, Mletshe & Dayal (forthcoming), Zulu sentences with and without OMs were constructed with the help of Zulu-speaking research assistants. Data were collected during one-on-one meetings with six consultants, in which the acceptability of the Zulu examples and the interpretations of agreeing and non-agreeing object-DPs were discussed. Further judgments were collected through the online administration of two questionnaires in which ten more consultants (five per questionnaire) were asked to answer questions about the interpretation of Zulu sentences in particular discourse contexts. Each questionnaire comprised Zulu sentences with or without an object-marked object. Some sentences appeared on both questionnaires, but whenever one questionnaire included a sentence *without* the OM, the same sentence, but *with* the OM, was part of the other questionnaire. This way, responses to both versions of the same sentence (with and without the OM) could be compared, while no consultant saw the same sentence in both versions. All consultants were L1 Zulu speakers and proficient in English, which was also the language used in the face-to-face meetings and in the questionnaires.

3. Object marking in Zulu and definiteness

Definiteness is commonly characterised in terms of the notions of *uniqueness* and *familiarity* (see e.g. Abott 2004; Lyons 1999; Roberts 2003; Schwarz 2009). Uniqueness means that a singular definite DP is licensed only if it has a unique referent, either because the descriptive content of the DP generally only applies to one individual or entity, (2a), or because only one individual or entity can have the relevant property in a particular context, (2b):

(2a) *The earth* revolves around *the sun*.

(2b) John showed me his new house. I like *the kitchen*.

Familiarity captures the intuition that the referent of a definite DP must have a discourse antecedent. This antecedent can be provided by a preceding linguistic expression to which the definite DP is anaphorically linked:

- (3a) A boy and a girl were in the room. *The boy* looked tired.
 (3b) Every farmer who owns a donkey beats *the donkey*.

Carstens, Mletshe & Dayal (forthcoming) demonstrate that in Xhosa (a Nguni language mutually intelligible with Zulu), “bare” augmented DPs³ can appear in all contexts in which definite DPs are licensed. The same holds for Zulu:

- (4a) E-bu-suku u-nga-bon-a *i-n-yanga*.
 LOC-14-night 2SG-can-see-FV AUG-9-moon
 'At night you can see the moon.'
 (4b) A-ngi-yi-thand-i le n-dlu, kodwa ngi-thand-a *i-khishi*.
 NEG-1SG-9.OM-like-FV 9.DEM9-house but 1SG-like-FV AUG-5.kitchen
 'I don't like this house, but I like the kitchen.'
 (5a) Ku-khona u-m-fana ne-n-tombazane e-kilasi-ni la-mi.
 EXPL-exist AUG-1-boy and.AUG-9-girl LOC-5.class-LOC 5.POSS-1SG
 Ngi-theng-el-e *u-m-fana* i-si-pho.
 1SG-buy-APPL-PST AUG-1-boy AUG-7-gift
 'There are a boy and a girl in my class. I bought a gift for the boy.'
 (5b) Uma u-m-limi e-ne-m-bongolo, u-zo-shay-a *i-m-bongolo*.
 if AUG-1-farmer 1.SM-have.AUG-9-donkey 1.SM-FUT-hit-FV AUG-9-donkey
 'If a farmer has a donkey, he will beat the donkey.'

In these environments, the definite objects can also be object-marked:⁴

- (6a) E-bu-suku u-nga-**yi**-bon-a *i-n-yanga*.
 LOC-14-night 2SG-can-9.OM-see-FV AUG-9-moon
 'At night you can see the moon.'
 (6b) A-ngi-yi-thand-i le n-dlu, kodwa ngi-ya-**li**-thand-a *i-khishi*.
 NEG-1SG-9.OM-like-FV 9.DEM9-house but 1SG-DJ-5.OM-like-FV AUG-5.kitchen
 'I don't like this house, but I do like the kitchen.'
 (7a) Ku-khona u-m-fana ne-n-tombazane e-kilasi-ni la-mi.
 17.LOC-exist AUG-1-boy and.AUG-9-girl LOC-5.class-LOC 5.POSS-1SG
 Ngi-**m**-theng-el-e i-si-pho *u-m-fana*.
 1SG-1.OM-buy-APPL-PST AUG-7-gift AUG-1-boy
 'There are a boy and a girl in my class. I bought a gift for the boy.'
 (7b) Uma u-m-limi e-ne-m-bongolo, u-zo-**yi**-shay-a *i-m-bongolo*.
 if AUG-1-farmer 1.SM-have.AUG-9-donkey 1.SM-FUT-9.OM-hit-FV AUG-9-donkey
 'If a farmer has a donkey, he will beat the donkey.'

The acceptability of the examples in (6)-(7) is consistent with the claim that object marking is a grammatical device to mark an object in Zulu as definite. However, in order to

³ That is, DPs based on nouns which have retained their initial vowel but are not modified by quantifier-like expressions such as demonstratives or numerals.

⁴ As shown by the translation of (6b), object marking can produce a polarity focus interpretation in Zulu. I have not consistently indicated this interpretation in my examples, but it was frequently offered by my consultants in their English translations of Zulu sentences with OMs. I discuss the correlation between object marking and polarity focus in section 5.

demonstrate that object-marked objects are *necessarily* definite, we also have to consider contexts in which definite objects are *not* licensed, and test whether object marking in these contexts is indeed ruled out, as predicted. However, as I show in the following subsections, object marking is possible in such contexts, contrary to prediction.

3.1 Uniqueness

Consider the Zulu example in (8):

- (8) U-Philani w-akh-a i-n-dlu no-Phephile w-akh-a
 AUG-1a.Philani 1.SM-build-FV AUG-9-house and.AUG-1a.Phephile 1.SM-build-FV
 i-n-dlu.
 AUG-9-house
 ‘Philani is building a house and Phephile is building a house.’

In (8), the object-DP *indlu* ‘house’ appears in both conjuncts. The most natural interpretation of (8) is that the two identical objects refer to different entities, i.e. that Philani and Phephile are building different houses. This reading is incompatible with a definite interpretation of the object-DPs: if they were definite, then (8) would be understood as Philani and Phephile building the same house (compare English ‘Phelani is building the house, and Phephile is building the house’). This is because of the uniqueness property, which entails that a definite DP denotes a singleton set.

Importantly, the non-coreference of the object-DPs is preserved in (9), where the objects are object-marked:

- (9) U-Philani u-ya-y-akh-a *i-n-dlu* no-Phephile
 AUG-1a.Philani 1.SM-DJ-9.OM-build-FV AUG-9-house and.AUG-1a.Phephile
 u-ya-y-akh-a *i-n-dlu*.
 1.SM-DJ-9.OM-build-FV AUG-9-house
 ‘Philani is building a house and Phephile is building a house.’

If object marking in Zulu was correlated with a definite interpretation of the object-marked DPs, then we would expect the object-DPs in (9) to have the same unique referent, contrary to fact – the identical objects in (9) are still interpreted as referring to different houses. This is the first piece of evidence that object-marked objects can be indefinite in Zulu.

Next, consider (10):

- (10) I-dlanzana la-ma-ntombazane na-ba-fana be-be-s-e-gunj-ini;
 AUG-5.handful 5.POSS-6-girl and.AUG-2-boy AUX-2.SM-EPEN-LOC-5.room-LOC
 i-ntombazane be-yi-fundis-a u-m-fana u-ku-dweb-a.
 AUG-9.girl AUX-9.SM-teach-FV AUG-1-boy AUG-15-draw-FV
 ‘Several girls and boys were in the room; a girl was teaching a boy to draw.’

The first sentence in (10) introduces a plurality of girls and boys in the discourse. The most natural reading of the second sentence is that the two DPs *intombazane* ‘girl’ and *umfana* ‘boy’ each refer to a member of the sets of girls and boys introduced in the first sentence. This specific partitive reading (Enç 1991) of the DPs is only available if the DPs are

interpreted as indefinites: for example, if *umfana* in (10) was definite, then this would entail the existence of a unique boy, which is inconsistent with the established context.

Importantly, when the DP *umfana* is object-marked, the sentence remains acceptable with the intended partitive interpretation:

- (11) I-dlanzana la-ma-ntombazane na-ba-fana be-be-s-e-gunj-ini;
 AUG-5.handful 5.POSS-6-girl and.AUG-2-boy AUX-2.SM-EPEN-LOC-5.room-LOC
 i-ntombazane be-yi-m-fundis-a u-m-fana u-ku-dweb-a.
 AUG-9.girl AUX-9.SM-1.OM-teach-FV AUG-1-boy AUG-15-draw-FV
 ‘Several girls and boys were in the room; a girl was teaching a boy (#the boy) to draw.’

The partitive interpretation of the object-DP in (11) provides further evidence that agreeing objects in Zulu can be interpreted as indefinites.

The example in (12) illustrates the same point:

- (12) U-Mary w-a-theng-a i-zin-cwadi ezin-thathu na-ma-phephandaba
 AUG-1a.Mary 1.SM-PST-buy-FV AUG-10-book 10.REL-three and.AUG-6-newspaper
 ama-bili.
 6.REL-two
 ‘Mary bought three books and two newspapers.’
- W-a-nik-a u-sisi wa-khe i-n-cwadi no-mama wa-khe
 1.SM-PST-give-FV AUG-1a.sister 1.POSS-1 AUG-9-book and.AUG-1a.mother 1.POSS-1
 w-a-m-nik-a i-phephandaba.
 1.SM-PST-1.OM-give-FV AUG-5.newspaper
 ‘She gave her sister a book and gave her mother a newspaper.’

Since the first sentence in (12) introduces three books and two newspapers, the DPs *incwadi* ‘book’ and *iphephandaba* ‘newspaper’ in the second sentence can only be interpreted as partitive indefinites (i.e. Mary gave *one of the three books* to her sister, and *one of the two newspapers* to her mother). Crucially, this interpretation is still available when the DP *incwadi* is object-marked:

- (13) W-a-yi-nik-a u-sisi wa-khe i-n-cwadi no-mama wa-khe
 1.SM-PST-9.OM-give-FV AUG-1a.sister 1.POSS-1 AUG-9-book and.AUG-1a.mother 1.POSS-1
 w-a-m-nik-a i-phephandaba.
 1.SM-PST-1.OM-give-FV AUG-5.newspaper
 ‘She gave her sister a book (#the book) and gave her mother a newspaper.’

If object marking made *incwadi* a definite DP, then the reading of (13) would be incongruous with the context established in the first sentence in (12). The well-formedness of (13) hence shows once again that object-marked objects can be indefinites.

3.2 Familiarity

The final test I discuss relates to the second property that characterizes definite DPs, familiarity. Since the referent of a definite DP should be familiar in the discourse, definite DPs cannot be used to introduce novel discourse referents. In contrast, the ability to

introduce novel discourse referents is what Dayal (2018) calls a “canonical property” of indefinites. A typical context in which new referents are introduced is the beginning of a story:

- (14) Kw-a-suk-a suk-el-a. I-n-kosi y-a-li-bulal-a i-zimuzimu.
 17.LOC-PST-go.away-FV go.away-APPL-FV AUG-9-king 9.SM-PST-5.OM-kill-FV AUG-5.cannibal
 ‘Once upon a time a king killed a cannibal (#the cannibal).’

(14) introduces two protagonists, a king (*inkosi*) and a cannibal (*izimuzimu*). Since neither referent has been mentioned before, we would not expect a definite DP to be felicitous here. The object-DP *izimuzimu* in (14) is object-marked. Therefore, if object marking entails definiteness, then (14) should be unacceptable.

The responses of Zulu speakers regarding (14) were not conclusive. Interestingly, most speakers accepted (14) as the beginning of a story, but some speakers also rejected the example in this context. Dayal (2018), who applies a similar test in Hindi, also reports “some speaker variation” with respect to her data. I suspect that these mixed judgments reflect the fact that examples such as (14) do not constitute an ideal test for (in-)definiteness. Note that even though (14) is acceptable for most speakers, it does not follow that for these speakers, an object-marked object can indeed introduce a new referent. As one of my consultants pointed out, the OM could have been used by the story-teller in order to “draw the audience in”, by making it sound *as if the cannibal had already been mentioned and was therefore known to them*. This suggests that (14) was accepted because of accommodation: some speakers were simply willing to tolerate a definite (and hence familiar) DP in the beginning of a story as a poetic effect intended by the narrator to imply “a story before the story”. Thus, even though a majority of speakers accepted (14), this does not justify the conclusion that the agreeing object can be indefinite. At the same time, (14) may have been rejected by other speakers for reasons unrelated to definiteness. As I discuss in Section 5, object marking has information-structural effects that may be incompatible with the specific conditions imposed by the narrative context established by (14). In light of these confounding factors, I do not consider (14) as a reliable test for (in-)definiteness.

To sum up, despite the inconclusive outcome of the familiarity test, I have demonstrated in this section that object-marked object-DPs in Zulu can be interpreted as indefinites, because they can violate the uniqueness requirement. This means that object marking cannot be regarded as a grammatical device to mark definiteness in Zulu.

4. Object marking in Zulu and specificity

I now examine whether object-marked objects in Zulu are necessarily specific. If this was the case, then object marking in Zulu could be considered “an instance of the morphosyntactic realization of specificity”, as Visser (2008: 15) suggests for Xhosa.

Farkas (1994, 2002) distinguishes three types of specificity. *Epistemic specificity* is defined in terms of a speaker’s cognitive state, i.e. whether the speaker has a particular individual or object in mind. Zulu speakers sometimes describe the meaning of a sentence with an OM by saying that the object’s referent is known to the speaker, and most accounts which assume that object marking in Bantu produces specific readings seem to be based on the notion of epistemic specificity (see e.g. Asimwe 2014: 16).

Farkas' second type of specificity is *partitive specificity*, which arises when an indefinite DP refers to a member or a subset of a discourse-familiar set (Enç 1991). I have already discussed examples of partitive specificity in Section 3 above. The specific partitive interpretation of the object-marked objects in the Zulu examples in (11) and (13) is consistent with the idea that object marking in Zulu renders an indefinite object specific.

Here I am concerned with the third type of specificity discussed by Farkas (1994, 2002): *scopal specificity*. A DP is scopally specific when it has wide(st) scope, and non-specific when it has narrow scope, with respect to a quantifier or operator (Karttunen 1976; Lyons 1999). To the best of my knowledge, the scopal properties of object-marked objects are not discussed in much detail in the Bantu literature, despite their obvious relevance for the study of the specificity effects of object marking. Below I take a first step to filling this gap.

4.1 Opaque contexts

The relation between narrow scope and non-specificity is most clearly demonstrated by so-called opaque contexts, which are created, for example, by intensional verbs (Fodor 1970; loup 1977). When an indefinite DP takes narrow scope with respect to such verbs, it does not have to have a referent in the world (it is referentially opaque), while the wide scope interpretation entails the existence of the individual denoted by the object. The second sentence in (15), which includes the intensional verb *-funa*, 'want, seek', is therefore ambiguous. The wide scope reading of the two DPs *indoda ecebileyo* 'rich man' and *indoda elungileyo* 'kind man' would entail that a particular rich man and a particular kind man exist who Sue and Mary want to marry. The narrow scope reading, which is clearly preferred in (15), merely states that Sue and Mary are looking for men with the desired properties, but there is no implication that such men indeed exist:

- (15) U-Mary no-Sue ba-fun-a u-ku-shad-a.
 AUG-1a.Mary and.AUG-1a.Sue 2.SM-want-FV AUG-15-marry-FV
 'Mary and Sue want to get married.'
- U-Sue u-fun-a i-n-doda e-cebile-yo, kanti u-Mary yena
 AUG-1a.Sue 1.SM-want-FV AUG-9-man 9.REL-rich-REL but AUG-1a.Mary 1.she
 u-fun-a i-n-doda e-lungile-yo.
 1.SM-want-FV AUG-9-man 9.REL-good-REL
 'Sue wants a rich man, but Mary, she wants a kind man.'

In (16), the second object-DP *indoda elungileyo* is object-marked. Importantly, the preferred interpretation of this DP is still the one with narrow scope:

- (16) U-Sue u-fun-a i-n-doda e-cebile-yo, kanti u-Mary yena
 AUG-1a.Sue 1.SM-want-FV AUG-9-man 9.REL-rich-REL but AUG-1a.Mary 1.she
 u-ya-yi-fun-a i-n-doda e-lungile-yo.
 1.SM-DJ-9.OM-want-FV AUG-9-man 9.REL-good-REL
 'Sue wants a rich man, but Mary, she does want a kind man.'

My consultants accepted (16) as a description of a scenario where Mary hasn't yet met a particular person, but merely knows that she wants her future husband to be kind. This narrow scope, non-specific interpretation of the agreeing object in (16) provides evidence that object marking does not always lead to a specific interpretation of the agreeing DP.

Another opaque context is created by negation. Object-marking an object-DP with narrow scope is possible here too (Zeller 2021):

- (17) U-Zodwa a-ka-**m**-fun-i u-*m-ntwana*.
 AUG-1a.Zodwa NEG-1.SM-1.OM-want-NEG AUG-1-child
 ‘Zodwa doesn’t want the/a/any child.’

(17) is compatible with a definite or a specific interpretation of the object-DP, according to which a particular child exists that is not wanted by Zodwa. However, the narrow scope, non-specific indefinite reading is also available in (17), according to which Zodwa doesn’t want any child (for example, (17) can mean that Zodwa doesn’t want to fall pregnant).

The narrow scope reading of object-marked objects in negated sentences is also illustrated by the interpretation of the sentence in (19), which was presented to Zulu speakers in combination with the scenario described in (18) (based on Carlson 1977, Matthewson 2004). The speakers were then asked whether (19) would be true or false in this scenario:

- (18) Suppose there were two books that you said you were going to buy. You go to the shop, look at both books, but then decide to buy only one of them, and not the other.

- (19) A-*ngi-yi*-theng-anga i-*n-cwadi*.
 NEG-1SG-9.OM-buy-NEG.PST AUG-9-book
 ‘I didn’t buy the/a/any book.’

With a wide scope reading of *incwadi* ‘book’ the sentence in (19) is true, as there is in fact a specific book in the scenario in (18) that was not bought. Under the narrow scope reading, in contrast, (19) is false, as this reading amounts to saying that no book was bought. Most speakers who were presented with the scenario in (18) answered that (19) would be false in this context, which suggests that for those speakers, the non-specific reading of the object-marked DP is not only available, but also the most prominent interpretation of (19). This provides further evidence that object-marked objects in Zulu are not necessarily specific.

4.2 Specificity effects

I now turn to scopal specificity in sentences with scope-bearing expressions which do not create opaque contexts. The sentence in (20) is ambiguous between a wide and a narrow scope reading of the object-DP. When the object-DP *isihlobo* ‘relative’ takes scope over the adverbial quantifier *zonke izinsuku* ‘every day’, (20) means that there is a specific relative of Bill’s (say, his grandmother) who he visits every day. When the adverbial scopes over the object-DP, the latter is interpreted non-specifically, and (20) means that Bill visits a different relative every day (Karttunen 1976; Lyons 1999):

- (20) U-Bill u-vakash-el-a i-si-hlobo zonke i-zin-suku.
 AUG-1a.Bill 1.SM-visit-APPL-FV AUG-7-relative 10.all AUG-10-day
 ‘Bill visits a relative every day.’

Interestingly, the narrow scope reading of (20) is no longer available when the object-DP is object-marked:

- (21) U-Bill u-ya-**si**-vakash-el-a *i-si-hlobo* zonke i-zin-suku.
 AUG-1a.Bill 1.SM-DJ-7.OM-visit-APPL-FV AUG-7-relative 10.all AUG-10-day
 ‘Bill does visit a relative every day.’

(21) can only mean that there is a specific relative who Bill visits every day. Here the object marker does indeed have an effect on the interpretation of the associated object-DP, marking it as obligatorily specific.

A specificity-effect was also observed in (23), a sentence which includes the repetitive adverb *futhi* ‘again’:

- (22) Ngi-fund-e i-n-cwadi futhi.
 1SG-read-PST AUG-9-book again
 ‘I read a/the book again.’
- (23) Ngi-**yi**-fund-ile *i-n-cwadi* futhi.
 1SG-9.OM-read-PST.DJ AUG-9-book again
 ‘I (did) read a/the book again.’

(22) is ambiguous and allows the object-DP to be interpreted in the scope of *futhi*, in which case it is non-specific: the speaker engaged again in the activity of book-reading, without necessarily reading the same book as before. In contrast, even when interpreted as indefinite, the agreeing object in (23) only allows a wide-scope reading, according to which there is a specific book which the speaker is reading again (i.e. the speaker either continues reading the same book, or is re-reading it).

To sum up this section, I have shown that object-marked objects in Zulu can be interpreted as non-specific when they are in the scope of intensional verbs or negation. However, a specificity-effect was observed when object-marked objects appear with other scope-bearing expressions, such as adverbial quantifiers and the adverb ‘again’. I discuss these observations in the following section.

5. Discussion

My objective was to examine the validity of the claim that object marking in Zulu is a morpho-syntactic device to mark definiteness and/or specificity. By demonstrating that object-marked objects in Zulu are compatible with indefinite and non-specific readings, this claim has been refuted. However, a question raised by this conclusion is how it can be reconciled with the observation that outside opaque contexts, an object-marked object in Zulu is typically interpreted as having a referent that is known to the speaker (and perhaps the hearer), a semantic effect of the OM that can be approximated in English by the use of the definite article. In this section I address this question. Due to space constraints, my discussion is brief, and in some parts speculative, but I hope it nevertheless sheds some light on the semantic/pragmatic role of object marking in Zulu, and identifies some directions for future research.

The literature on object marking in Zulu has demonstrated that agreeing objects are barred from vP-internal positions and are obligatory (left- or right-) dislocated (Adams 2010;

Buell 2005; Cheng & Downing 2009; Van der Spuy 1993; Voeltz 2004).⁵ Importantly, the vP is the domain of focus in Zulu: focused constituents (e.g. *wh*-expressions, or elements modified with the focus marker *kuphela*, ‘only’) must appear inside vP. In contrast, object-marked, dislocated DPs in Zulu are incompatible with semantic focus; they are ‘antifocus’ (Carstens & Zeller 2020; Zeller 2015).

A sentence with an object-marked, dislocated DP can be interpreted in various ways. One possibility is to interpret the referent of the ‘antifocus’ DP as discourse-given or familiar. As noted for Xhosa by Bloom Ström (2020), this interpretation of the dislocated agreeing object resembles definiteness, and the definite article in an English translation can therefore approximate this particular interpretative effect of object marking in Zulu. Furthermore, familiarity entails referentiality; consequently, the use of an OM may give rise to a specific interpretation of the agreeing object, one in which the speaker has a particular individual or object in mind.

However, object marking in Zulu does not always imply that the object’s referent is familiar. The ‘antifocus’ property of an agreeing object can also be licensed in terms of what Güldemann (2016) and Kerr & Van der Wal (2022) call “maximal backgrounding”. Maximal backgrounding is a strategy to mark focus on an element indirectly, by removing all other potentially focusable elements from the relevant focus domain. Object marking and dislocation in Zulu can have exactly this function. For example, as shown by Cheng & Downing (2009), object marking the *indirect* object of a ditransitive verb is a way to mark focus on the *direct* object in Zulu: dislocation of the indirect object leaves the direct object as the sole DP in the vP, and as a result, the latter can be narrowly focused. Another instantiation of maximal backgrounding is the expression of polarity focus (Kerr & Van der Wal 2022). Polarity focus is available in Zulu whenever the focus domain does not contain any overt phrasal constituent. In a monotransitive sentence, this is achieved by object marking and dislocation of the verb’s sole object:

- (24) Ngi-li-qoq-ile nje *i-gumbi* *la-mi*.
 1SG-5.OM-tidy-PST.DJ just AUG-5.room 5.POSS-my
 ‘I did clean my room.’

The object-DP in (24) has been removed from the vP, thereby creating the necessary configuration for polarity focus. Crucially, in such examples, object marking does not directly affect the interpretation of the agreeing object. Rather, the ‘antifocus’-property of the object is licensed by placing focus on the polarity of the sentence.⁶

The use of object marking as a maximal backgrounding-strategy offers an explanation for why agreeing objects can be interpreted as non-specific indefinites in Zulu. I suggest that

⁵ In examples (21) and (23), the object-marked objects precede adverbs, which is also the word order in (20) and (22), where the objects are *in situ*. However, note that the verbs in (21) and (23) are in the so-called disjoint form. The disjoint form in Zulu, marked morphologically in the present and recent past tense, signals that the verb is final in the vP, and that any post-verbal material is vP-external (see Halpert 2017; Van der Spuy 1993; Voeltz 2004 a.o.). Therefore, the agreeing objects (and the adverbs) in (21) and (23) must be outside the vP, which implies that the objects are right-dislocated.

⁶ Sikuku, Diercks & Marlo (2018) and Lippard et al. (2021) discuss Bantu languages such as Lubukusu and Cinyungwe, in which polarity focus is expressed by object marking an *in situ* object. It will be interesting to explore the relationship between this polarity focus marking strategy and the one exhibited by Zulu, where polarity focus marking via maximal backgrounding requires the dislocation of the object-marked object. See Diercks (2022) for an attempt at a unified account.

this interpretation becomes possible whenever object marking and dislocation instantiate maximal backgrounding, because maximal backgrounding does not entail an interpretation of the referent of the agreeing object as familiar. It is noteworthy that my consultants frequently provided English translations with polarity focus for monotransitive Zulu sentences with object-marked objects, including those where the agreeing object appeared in an opaque context. Furthermore, according to Hyman & Watters (1984), negative polarity is focused by default, and as Zeller (2021) shows, this explains why in negated sentences in Zulu, objects are typically object-marked and dislocated: ‘antifocus’-marking is a maximal backgrounding-strategy to express the “default” reading of sentences with negative polarity. It is therefore not surprising that non-specific interpretations of agreeing objects are possible, and often preferred, in exactly these contexts.

This proposal now gives rise to another question, related to the results of Section 4.2. If maximal backgrounding licenses the non-specific reading of an object-marked object-DP, why are agreeing objects in sentences with scope-bearing adverbial expressions always interpreted as specific? I assume that this specificity effect is independent of how the ‘antifocus’-property of the object-marked object is interpreted, and is instead a consequence of the fact that object-marked DPs obligatorily take wide scope with respect to the relevant adverbs. I suggest that the scopal interpretation of a dislocated DP is constrained by the syntax, in the sense that its dislocated position represents the lowest position in which the DP can be interpreted with respect to scope. Assuming that the vP-external position of dislocated objects c-commands the position in which scope-bearing adverbial expressions are interpreted, it then follows that an object-marked object obligatorily scopes over these adverbials, and is interpreted as scopally specific. In contrast, the dislocated position of an object-DP is arguably still in the c-command domain of intensional operators and negation, which are typically associated with positions higher in the structure (see e.g. Buell 2005 for the negative prefix *a-* in Nguni; see Schwarz 2021 for intensional verbs). Therefore, when interpreted in relation to these operators, a dislocated object whose ‘antifocus’-property is licensed by maximal backgrounding is non-specific.

While the discussion and data presented in Sections 3 and 4 addressed the specific research question that this paper set out to answer, the ideas discussed in this section are exploratory, and more empirical research is needed to test the predictions that follow from these ideas. However, I believe that this brief discussion can add to recent studies that offer formal accounts of the information-structural effects of object marking and dislocation in Bantu (cf. Diercks 2022; Sikuku & Diercks forthcoming), and serve as a launch pad for an investigation of the interplay between these phenomena and semantic notions such as uniqueness, familiarity, specificity and scope.

6. Conclusion

Agreeing objects in Zulu are not necessarily definite, and not necessarily specific. Rather, the interpretative effects of object marking follow from its information-structural impact: object marking in Zulu signals that the agreeing object is outside the focus domain. This ‘antifocus’-effect can have different semantic or pragmatic consequences. The referent of the object may be interpreted as familiar, or object marking is a maximal backgrounding-strategy by means of which some other element in the sentence is indirectly marked as focus.

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References

- Abott, Barbara. 2004. Definiteness and indefiniteness. In Laurence R. Horn & Gregory Ward (eds.), *The Handbook of Pragmatics*, 122-149. Malden, MA: Blackwell Publishing.
- Adams, Nikki. 2010. The Zulu ditransitive verb phrase. Chicago, IL: The University of Chicago dissertation.
- Andrason, Alexander & Marianna W. Visser. 2016. The mosaic evolution of Left Dislocation in Xhosa. *Stellenbosch Papers in Linguistics Plus* 50. 139-158.
- Asiimwe, Allen. 2014. *Definiteness and specificity in Runyankore-Rukiga*. Stellenbosch: University of Stellenbosch dissertation.
- Beaudoin-Lietz, Christa, Derek Nurse & Sarah Rose. 2004. Pronominal object marking in Bantu. In Akinbiyi Akinlabi & Oluseye Adesola (eds.), *Proceedings of the 4th World Congress of African Linguistics*, New Brunswick 2003, 175-188. Cologne: Rüdiger Köppe Verlag.
- Bloom Ström, Eva-Marie. 2020. The existential copula in Xhosa in relation to indefiniteness. *Studies in African Linguistics* 49(2). 213-240.
- Bresnan, Joan & Lioba Moshi. 1990. Object Asymmetries in Comparative Bantu Syntax. *Linguistic Inquiry* 21(2). 147-181.
- Buell, Leston. 2005. *Issues in Zulu verbal morphosyntax*. Los Angeles, CA: University of California dissertation.
- Carlson, Greg N. 1977. A unified analysis of the English bare plural. *Linguistics and Philosophy* 1. 413-457.
- Carstens, Vicki & Jochen Zeller. 2020. 'Only' in Nguni: A Phrase-Final Particle Meets Antisymmetry Theory. *Linguistic Inquiry* 51(2). 199-235.
- Carstens, Vicki, Loyiso Mletshe & Veneeta Dayal. Forthcoming. (In-)definiteness in Xhosa: A Case Study. In Veneeta Dayal (ed.) *The Open Handbook of (In-)definiteness: A Hitchhiker's Guide to Interpreting Bare Arguments*. Open Handbooks in Linguistics. Cambridge: MIT Press.
- Cheng, Lisa Lai-Shen & Laura J. Downing. 2009. Where's the Topic in Zulu? *The Linguistic Review* 26(2). 207-238.
- Dayal, Veneeta. 2018. (In-)definiteness without Articles: Diagnosis, Analysis, Implications. In Ghanshyam Sharma & Rajesh Bhatt (eds.), *Trends in Hindi Linguistics*, 1-26. Berlin: Mouton de Gruyter.

- Dayal, Veneeta (ed.). Forthcoming. *The Open Handbook of (In)definiteness: A Hitchhiker's Guide to Interpreting Bare Arguments*. Open Handbooks in Linguistics. Cambridge: MIT Press.
- Devos, Maud & Rozenn Guérois. 2022. Micro-variation in object marking in North Mozambican Bantu languages. In Andrew Nevins, Anita Peti-Stantić, Mark de Vos & Jana Willer-Gold (eds.), *Angles of Object Agreement*, 164-194. Oxford: Oxford University Press.
- Diercks, Michael. 2022. Information structure is syntactic: Evidence from Bantu languages. Unpublished manuscript. Pomona College.
- Doke, Clement M. 1997. *Textbook of Zulu grammar*. Sixth edition (first edition 1927). Cape Town: Maskew Miller Longman.
- Enç, Mürvet. 1991. The Semantics of Specificity. *Linguistic Inquiry* 22(1). 1-25.
- Farkas, Donka F. 1994. Specificity and scope. In Lea Nash & George Tsoulas (eds.), *Actes du Premier Colloque Langues & Grammaire*, 119–137. Paris.
- Farkas, Donka F. 2002. Specificity distinction. *Journal of Semantics* 19. 213–243.
- Fodor, Janet D. 1970. *The Linguistic Description of Opaque Contexts*. Boston, MA: MIT dissertation.
- Hualde, José. 1989. Double object constructions in Kirimi. In Robert Botne & Paul Newman (eds.), *Current Approaches to African Linguistics* 5, 179-189. Dordrecht: Foris Publications.
- Gambarage, Joash Johannes. 2019. *Belief-of-existence determiners: Evidence from the syntax and semantics of Nata augments*. Vancouver: The University of British Columbia dissertation.
- Givón, Talmy. 1976. Topic, pronoun, and grammatical agreement. In Charles Li (ed.), *Subject and topic*, 149–188. New York: Academic Press.
- Güldemann, Tom. 2016. Maximal backgrounding = focus without (necessary) focus encoding. *Studies in Language* 40(3). 551-590.
- Halpert, Claire. 2017. Prosody/syntax mismatches in the Zulu conjoint/disjoint alternation. In Jenneke van der Wal & Larry M. Hyman (eds.), *The conjoint/disjoint alternation in Bantu*, 329-349. Berlin: Mouton de Gruyter.
- Hyman, Larry. M. & John R. Watters 1984. Auxiliary Focus. *Studies in African Linguistics* 15(3). 233-273.
- Ioup, Georgette. 1977. Specificity and the Interpretation of Quantifiers. *Linguistics and Philosophy* 1(2), 233-245.
- Karttunen, Lauri. 1976. Discourse Referents. In James D. McCawley (ed.), *Syntax and Semantics 7: Notes from the Linguistic Underground*, 363–386. New York NY: Academic Press.
- Kerr, Elizabeth J. & Jenneke van der Wal. 2022. Indirect verum marking in 10 Bantu languages. Conference presentation, *Bantu9*, Malawi University of Science and Technology.
- Kidima, Lukowa. 1987. Object agreement and topicality hierarchies in Kiyaka. *Studies in African Linguistics* 18. 175-209.
- Kimambo, Gerald Eliniongoze. 2018. Object marking in Swahili, definiteness, specificity or both? *South African Journal of African Languages* 38(1). 27–35.
- Lippard, Hannah, Justine Sikuku, Crisófia Langa da Câmara, Rose Letsholo, Madelyn Colantes, Kang (Franco) Liu and Michael Diercks. 2021. Emphatic Interpretations of Object Marking in Bantu Languages. To appear.
- Lyons, Christopher. 1999. *Definiteness*. Cambridge: Cambridge University Press.

- Marlo, Michael M. 2015. On the number of object markers in Bantu languages. *Journal of African Languages and Linguistics* 36(1). 1-65.
- Marten, Lutz & Nancy C. Kula. 2012. Object marking and morphosyntactic variation in Bantu. *Southern African Linguistics and Applied Language Studies*, 30(2). 237–253.
- Marten, Lutz & Deograsia Ramadhani. 2001. An overview of object marking in Kiluguru. *SOAS Working Papers in Linguistics* 11. 259-275.
- Matthewson, Lisa. 2004. On the Methodology of Semantic Fieldwork. *International Journal of American Linguistics* 70(4). 369-415.
- Mojapelo, Mampaka Lydia. 2007. *Definiteness in Northern Sotho*. Stellenbosch: University of Stellenbosch dissertation.
- Riedel, Kristina. 2009. *The syntax of object marking in Sambia: a comparative Bantu perspective*. Utrecht: LOT.
- Riedel, Kristina. 2022. Object marking in Bantu: Reassessing agreement. In Andrew Nevins, Anita Peti-Stantić, Mark de Vos & Jana Willer-Gold (eds.), *Angles of Object Agreement*, 110-132. Oxford: Oxford University Press.
- Roberts, Craige. 2003. Uniqueness in definite noun phrases. *Linguistics and Philosophy* 26. 287–350.
- Schwarz, Florian. 2009. *Two types of definites in natural language*. Amherst, MA: University of Massachusetts dissertation.
- Schwarz, Florian. 2021. Intensional Transitive Verbs. In Daniel Gutzmann, Lisa Matthewson, Cécile Meier, Hotze Rullmann & Thomas. E. Zimmermann (eds.), *The Wiley Blackwell Companion to Semantics*. Hoboken, NJ: John Wiley & Sons. DOI: 10.1002/9781118788516.sem113.
- Sikuku, Justine, Michael Diercks & Michael Marlo. 2018. Pragmatic effects of clitic doubling: Two kinds of object markers in Lubukusu. *Linguistic Variation* 18(2). 359-429.
- Sikuku, Justine & Michael Diercks. Forthcoming. *Object marking in Lubukusu. At the interface of pragmatics and syntax*. Berlin: Language Science Press.
- Taji, Julius. 2020. Definiteness in Chiyao. *Ghana Journal of Linguistics* 9(2). 44-64.
- Van der Spuy, Andrew. 1993. Dislocated noun phrases in Nguni. *Lingua* 90. 335-355.
- Van der Wal, Jenneke. 2022. *A Featural Typology of Bantu Agreement*. Oxford: Oxford University Press.
- Visser, Marianna W. 2008. Definiteness and specificity in the isiXhosa determiner phrase. *South African Journal of African Languages* 28(1). 11-29.
- Voeltz, F.K. Erhard. 2004. Long and short verb forms in Zulu. Ms., University of Cologne.
- Wald, Benji. 1979. The Development of the Swahili Object Marker: A Study of the Interaction of Syntax and Discourse. In Talmy Givón (ed.), *Discourse and Syntax* 12, 505-524. New York: Academic Press.
- Zeller, Jochen. 2015. Argument prominence and agreement: explaining an unexpected object asymmetry in Zulu. *Lingua* 156. 17-39.
- Zeller, Jochen. 2021. 'Not' in focus: objects under negation in Zulu. *Studies in African Linguistics* 50(1). 38-58.