

Chapter 8

Object marking in four Mozambican Bantu languages

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Object marking in Bantu is an area which has received substantial attention (e.g. Marten & Kula 2012, Riedel 2009, Marten et al. 2012, Zeller 2014). In many languages of this group, a morpheme which is co-referential with the object can also be incorporated into the verb structure. The present chapter, which looks at data from four Mozambican languages, aims to document and describe the situation in these languages with respect to object marking. The data show that the languages analyzed in this paper can be divided into three groups: Group 1, composed of Cinyungwe and Ciwutee, in which object marking is not obligatory with particular object NPs; Group 2 comprising of Citshwa, in which the object marker and the object argument cannot co-occur, object marking is not obligatory with particular object NPs and there is no locative object markers; and Group 3, Ciyaawo, in which object markers are not obligatory with particular object NPs and only the benefactive object can be expressed by an object marker in double object constructions. Taking into account the data from the four languages, we suggest that the obligatory requirement for an object marker [+OM] associated with some transitive verbs and structures should be added as a seventh parameter to the six parameters of variation in object marking in Bantu put forward by Marten & Kula (2012). Due to the existence of transitive verbs subcategorized as [+OM], we further encourage scholars to examine these parameters of variation in other Bantu languages in light of these features of variation.

1 Introduction

The Bantu languages are known for the systematic way in which grammatical relations are morphologically marked in the verbal structure (Ngunga (2014)). In



the case of object marking, many of these languages exhibit agreement with both the subject and the object. Agreement with the subject is usually grammatically obligatory, while the status of object marking is often more pronominal (Marten & Ramadhani 2001) and may be optional. Object markers are affixes or clitics that identify and cross-reference an object argument. Thus, the phenomenon of object marking on verbs in Bantu languages is a mechanism for referring to discourse-familiar entities, similar to pronominalization (Sikuku et al. 2018). In this paper, we use the term object marking to refer to the way a lexical object is reflected within the verb structure through a co-referential marker (Baker 1988, Corbett 2006, Deen 2006, amongst others).

The ambiguity of the status of object markers in Bantu has received considerable attention in the literature (Marten & Kula 2012, Riedel 2009, Marten et al. 2012, Zeller 2014 among others). In Bantu languages, a wide range of prefixes (subject, object, tense, aspect, mood, negation, and other markers) and suffixes (derivational and inflectional) can be attached to the lexical verb root. In many languages, the object markers (OMs) are attached directly to the verb stem. See the examples in (1) and (2) presented below where the objects are cross-referenced by the forms *wa-* and *ci-* respectively.

- (1) Kiswahili (G42) (Riedel 2009: 46)

A-li-wa-won-a

SM1-PAST-OM2-see-FV

‘he saw them’

- (2) Cinyungwe (N43)

Iye a-da-ci-mog-a.

he SM1SG-PFV-OM7-jump-FV

‘he jumped it’

The slot immediately before the verb root has largely been identified as the OM slot in the Bantu verb structure (Ngunga (2014)). However, there is no such consensus about the grammatical status of OMs as pronominal or agreement markers (Bresnan & Mchombo 1987, Deen 2006, Riedel 2009), since in individual languages the OMs behave differently.

The object argument may or may not co-occur with the object marker depending on a series of syntactic, pragmatic and semantic factors. This means that there is a difference between Bantu languages concerning the possibility of the co-occurrence of the object marker and the corresponding object argument (Ngunga 2014, Zeller 2014). The example in (3) illustrates that the co-occurrence

of the object marker and the object argument is possible in IsiZulu, but it is not possible in Kinyarwanda, as example (4) illustrates.

- (3) Isizulu (S42) (Zeller 2012: 219)
 A-ba-ntwana ba-ya-si-thand-a lesi si-kole
 AUG-2-child SM2-DIS-OM7-like-FV DEM7 7-school
 ‘the children like this school.’
- (4) Kinyarwanda (L12) (Riedel 2009: 76)
 * A-ba-aana ba-a-ra-bi-ri-ye i-bi-ryo ejo.
 AUG-2-child SM2-REM-DIS-OM8-eat-PFV AUG-8-food yesterday
 Intended: ‘the children ate the food yesterday’

According to Iorio (2015), the co-occurrence of the object marker and the co-referring object argument is only possible if the latter is right dislocated. This dislocation results in a definiteness and specificity effect on the object arguments with which they co-occur. See the Bembe examples below:

- (5) Bembe (D54) (Iorio 2015: 196)
- a. mwana a-a-yak-a ngyo?a. [VO]
 SM1-child SM1.SG-PFV-kill-FV SM9.snake
 ‘the child has killed a/*the snake.’
- b. mwana a-a-ya-yak-a. [OM-V]
 SM1-child SM.SG1-PFV-OM9-kill-FV
 ‘the child has killed it.’
- c. *mwana a-a-ya_i-yak-a ngyo?a_i *[OM-V O]
 SM1-child SM1.SG-PFV-OM9-kill-FV SM9.snake
 Intd.: ‘the child has killed a/he snake’
- d. mwana a-a-ya_i-yak-a, ngyo?a_i [OM-V] [O]
 SM1-child SM1.SG-PFV-OM9-kill-FV SM9.snake
 ‘the child has killed it, the/*a snake (that is)’

The co-occurrence of the object marker and the nominal object is not the only variation that is found in object marking in Bantu languages. According to van der Wal (2015), in languages which allow the occurrence of the object marker and the co-referring, there is a great deal of variation as to which objects are marked by an object marker. In Nyarutu, for example, it is usually the animate, definite and/or given objects that are doubled by an object marker (van der Wal 2015, 2016). Therefore, the example in (6b) is ungrammatical because animate objects must be doubled by an object marker.

- (6) a. Nyarutu (F32) (van der Wal 2015: 6 [via Hualde 1989: 182])
 n-a-m̩-onaa Maria.
 SM1SG-PST-1OM-see 1.Maria
 ‘I saw Maria.’
 b. * n-a-onaa Maria.
 SM1SG-PST-OM1-see 1.Maria
 Intd: ‘I saw Maria.’

At this point we notice that although OM occurs in the verbal structure of several Bantu languages, their occurrence and/or co-occurrence with the object argument is determined by several factors. According to Marten & Ramadhani (2001), in Kiluguru (G30), a language spoken in Tanzania, the distribution of object marking in simple transitive predicates is partly motivated by the syntactic context and semantic aspects. Moreover, in some cases, the object is interpreted as being more definite when the object agreement is present. The other, probably more important, dimension to the analysis of object marking in Kiluguru is pragmatic, since the use of object agreement is more related to the anaphoric structure of the discourse and to evaluations by speakers in relation to what they hear. Marten & Ramadhani (2001) also claim that in this language, in contrast to simple predicates, verbs such as *-ona* ‘see’, *-phika* ‘find’ and *-ing’a* ‘give’ obligatorily require the use of the OM with the lexical object. This is a point to which we will return also for the languages under examination here in (§3) also for the languages under examination.

The high degree of diversity in the morphological marking of object arguments in Bantu languages is reflected in the diversity of proposals made by several authors using data from different languages. Marten & Kula (2012), for instance, present six parameters for the investigation of variation in object marking based in 16 Bantu languages.

A different approach, adopted by Zeller (2014), divides Bantu languages into three types, namely: Type 1, where object markers are agreement markers; Type 2, where object markers are pronominal clitics; and Type 3, where object marking is a reflex of A-bar movement of the corresponding object.

Aissen (2002) claims that object marking is based on semantic and pragmatic grounds. In some languages, it is the pragmatic character of the object that determines whether it is obligatory or optional, or if it is excluded. In pragmatic and morphological object marking, the objects that most resemble subjects are overtly case-marked, whereas syntactic objects are obligatorily case-marked if they stand in a position that is more marked for an object. This is the case for

languages like Hungarian and Malayalam (see Aissen (2002)) for further details. For Aissen (2002: 437), the prominence scale for direct objects is as follows:

Animacy: Human > Animate > Inanimate

Definiteness: Personal pronoun > Proper name > Definite NP > Indefinite specific NP > Non-specific NP

This variation in object marking reflects the tension between two principles: iconicity, which prefers semantic markedness to be expressed by morphology, and economy, which would rather be devoid of structure whenever possible (Aissen 2002).

The current paper seeks to contribute to the understanding of object marking in Bantu by applying Marten & Kula's (2012) six parameters to four Mozambican Bantu languages. We also develop a seventh parameter for the four languages analyzed in this paper, which is related to the obligatoriness of object markers with specific transitive verbs and specific structure as we shall see in §3.

This paper is organized as follows. Following this introduction, we present Marten & Kula's (2012) six parameters (§2). We then apply these parameters to four Mozambican Bantu languages (§3), before presenting some conclusions (§4).

2 A parametric approach to object marking in Bantu

Studies of object marking have shown differences regarding the realization of object markers in Bantu languages. One of these studies is that of Marten & Kula (2012), who identified a number of micro-parameters that determine cross-Bantu variation. Marten & Kula (2012) present six parameters relating to the investigation of the variation in object marking in 16 Bantu languages (7). The languages of their study are: Bemba (M42), Chaga (Kivunjo) (E62b), Chichewa (N31), Ha (D66), Haya (E22), Kinyarwanda (D60), Lozi (K21), Makhuwa (P31), ciNsenga (N41), Otjiherero (R31), Ruwund (L53), Sambaa (G23), siSwati (S43), Kiswahili (G42), Setswana (S31), and Yeyi (R41).

- (7) Morphosyntactic parameters of object marking in Bantu (Marten & Kula 2012: 5).
 - (i) Can the object marker and the object argument co-occur?
 - (ii) Is an object marker obligatory with particular object NPs?
 - (iii) Are there locative object markers?
 - (iv) Is object marking restricted to one object marker per verb?

- (v) Can either benefactive or theme objects be expressed by an object marker in double object constructions?
- (vi) Is an object marker required/optional/disallowed in object relatives?

2.1 (i) The co-occurrence of object markers and lexical objects

In some Bantu languages, such as Kiswahili (8), there are no restrictions of co-occurrence of an object marker and a co-referential overt NP. This means that the object marker can be used together with an overt NP. However, in other languages like Otjiherero, the object marker cannot co-occur with an overt NP (9).

- (8) Kiswahili (G42) (Marten & Kula 2012: 240)

ni-li-mw_i-on-a Juma_i.
 SM1SG-PAST-OM1-see-FV Juma
 'I saw Juma'

- (9) Otjiherero (R31)(Marten & Kula 2012: 240)

* mb-é vé mún-ù òvá-nátjè.
 SM1SG-PAST OM2 see-FV 2-children
 Intd.: 'I saw the children'

The examples in (8) and (9) illustrate that Swahili behaves differently from Otjiherero. In Swahili (8), the co-occurrence of the object marker (-mw-) and the overt object NP (Juma) yields a grammatical result which is not possible in Otjiherero (9).

2.2 (ii) The obligatoriness of object markers with specific classes of objects

This parameter of variation relates to cases where the co-occurrence of object markers and co-referential NPs is obligatory with specific NPs. This can be found in Swahili for example, where object marking is obligatory with animate objects, particularly nouns which refer to humans, as shown in (10a, b) below:

- (10) Kiswahili (G42) (Riedel 2009: 46)

- a. ni-li-*(mw_i)-on-a m-toto_i
 SM-PFV-(OM1)-see-FV SM1-child
 'I saw his child'

- b. * ni-li-on-a m-toto
 SM-PFV-see-FV SM1-child
 Intd: 'I saw the child'

In contrast, the use of the object marker in Kiswahili is structurally optional with inanimate NPs, as exemplified in (11) from Marten & Kula (2012: 241):

- (11) ni-li-(ki)-on-a ki-tabu
 SM-PFV-(OM7)-see-FV 7-book
 'I saw a/the book'

There are also languages where the thematic role of the object determines whether it can co-occur with an object marker. For instance, in Ruwund, the benefactive object can co-occur with the object marker (12a), but cannot occur with a theme object (10b).

- (12) Ruwund (D62) (Marten & Kula 2012: 241)
- a. ka-ma-mu-tum-in mwâan.
 INF-OM6-OM1-send-APPL 1.child
 'to send the child them'
- b. * ka-ma-mu-tum-in mwâan ma-long.
 INF-OM6-OM1-send-APPL 1.child 6-plates
 'to send the child the plates'

2.3 (iii) The presence of locative object markers

In languages like Cinsenga and Setswana where locative objects can be expressed by locative object markers, locative nouns and locative object markers can co-occur. This is shown in the examples in (13) and (14):

- (13) Cinsenga (N41) (Marten & Kula 2012: 243)
 ku-Lilongwe n-a-ku-ziw-a.
 17-Lilongwe SM1-PRES-OM17-know-FV
 'Lilongwe I know it (there)'
- (14) Setswana (S31a)
 ke a gó itsé.
 SM1 PRES OM17 know
 'I know it (there)'

However, some other languages do not have locative object markers.

2.4 (iv) The multiple object markers

The fourth parameter of object marking variation proposed by Marten & Kula (2012) is related to the number of object markers allowed per inflected verb form. There are languages that do not allow multiple object markers in the same verb. This is what happens in Bemba which allows one object marker, as shown in (15) below:

(15) Kiswahili

- a. ni-li-m-p-a.
SM1-PST-OM1-give-FV
'I gave him (it)'
- b. * ni-li-i-m-p-a.
SM1-PST-OM9-OM1-give-FV
Intd: 'I gave him it'

In contrast to the Bemba examples present above, each lexical object in Sambaa may have its corresponding OM in the verb structure. Consider the example in (16):

(16) Sambaa (L12) (Riedel 2009: 72)

- n-za-**ha-ci-m**-nka Stella ki-tabu.
SM-PFV-OM16-OM7-OM1-give Stella 7-book
'I gave Stella a book there'

This fact has led scholars like Henderson (2006) and Zeller (2014) to argue that in Bantu, OMs can function as agreement markers and pronominal clitics.

It is important to note that in languages with multiple object marking, there is variation as to which objects are marked. In Bemba it is possible to mark more than one object if both object markers are animate (17a) or if the object marker closest to the verb is the first person singular *n-* (17b).

(17) Bemba (M42) (Marten & Kula 2012: 245)

- a. mù-kà-**bá-mú**-éb-él-á-kó.
SM1-FUT-OM2-OM1-tell-APPL-FV-PRO17
'you will tell them for him.'
- b. mú-ká-**cí-mù-n**-twààl-íj-é-kó.
SM2-FUT-OM7-OM1-OM1-return-APPL-FV-PRO17
'you should return it to him/her for me.'

However, in other languages object markers can co-occur in an unrestricted manner.

2.5 (v) The object marking in double object constructions

According to Marten & Kula (2012), another well-known parameter of variation relates to object marking in double object constructions. There are languages in which only the benefactive object in a double object construction can be object marked and those in which either the benefactive or the theme can be marked.

The ungrammaticality of (18b) illustrates that in Chichewa only the benefactive object can be object-marked on the verb in a double object construction. In contrast, in Otjiherero the theme can also be object-marked (19):

(18) Chichewa (N31a) (Marten & Kula 2012: 247)

- a. a-lenje a-ku-wá-phík-ir-á zí-tumbúwa (a-nyani).
 2-hunters SM2-PRES-OM2-cook-APPL-FV 8-pancakes 2-baboons
 ‘the hunters are cooking (for) them (the baboons) some pancakes’
- b. *a-lenje a-ku-wá-phík-ir-á a-nyani (zí-tumbúwa).
 2-hunters SM2-PRES-OM8-cook-APPL-FV 2-baboons 8-pancakes

(19) Otjiherero (R31) (Marten & Kula 2012: 247)

- Má-yé ì tjángér-é òvâ-nâtjé.
 PRES.SM OM9 write-APPL-FV 2-children
 ‘they are writing the children it’

2.6 (vi) The object marking in relative clauses

The last parameter proposed by Marten & Kula (2012) pertains to the use of object markers in object relative clauses. In descriptive terms, three groups of language types can be distinguished: (i) those where object markers are required in object relatives (e.g. Setswana); (ii) those where object markers are optional (e.g. Swahili) and (iii) those where object markers are not allowed in object relative clauses (e.g. Lozi). These three types are illustrated by examples (20), (21) and (22) below.

(20) Setswana (Marten & Kula 2012: 248)

- a. di-kwelo tse ke di bone-ng ...
 10-books REL10 SM1.PAST OM10 see-REL
 ‘the books which I saw them...’

- b. * di-kwelo tse ke bone-ng ...
10-books REL10 SM1.PAST see-REL
'the books which I saw them...'

The example in (20b) is ungrammatical because the object relative construction does not have an object marker.

The example of the second type of language is exemplified by Swahili, where object marking in object relatives is possible, but not required (21):

- (21) Swahili
ki-tabu amba-cho ni-li-(ki-)som-a ...
7-books REL-7 SM1-PAST-(OM7)-read-FV
'the book which I read (it)'

The third pattern is shown with the example from Lozi, where object markers in object relatives are not allowed.

- (22) Lozi (K21) (Marten & Kula 2012: 248)
* buka ye-ne-ba-(ye)-bon-i ba-nana fa-tafulle ki-ye-tuna.
9.book 9.REL-PAST-SM2-(OM9)-see-FV 2-children 16-table COP-SM9-big
Intd: 'the book which the children saw it on the table is big.'

Moreover, example (22) is important because it illustrates that objects are not required in relative constructions.

3 Object marking in four Mozambican Bantu languages

In the present section, we examine properties of object marking in four Mozambican Bantu languages, namely, Cinyungwe, Citshwa, Ciwutee, and Ciyaawo. We analyse these languages using six parameters of variation from Marten & Kula (2012). The languages analyzed in this paper were chosen on the basis of available information and our own knowledge as native speakers of Ciyaawo (first author) and Cinyungwe (second author). In §3.1 we start our discussion by analyzing data from Cinyungwe.

3.1 Object marking in Cinyungwe

Some Bantu languages show restrictions on the co-occurrence of an object marker and the co-referential object argument. The first parameter presented by Marten & Kula (2012) identifies the conditions under which an object marker can co-occur with a corresponding object argument after the verb.

3.1.1 (i) Can the object marker and the object argument co-occur?

Cinyungwe is a Mozambican Bantu language spoken in Tete Province by 457,290 speakers (Ngunga & Faquir 2011: 108). In Cinyungwe, the co-occurrence of the object argument and the OM within the same sentence is possible only if the object is a dislocated adjunct (i.e. it is not *in situ*), as illustrated in (23) below:

(23) Cinyungwe (N43)

- a. baba a-da-nyamul-a m-wana.
1.dad SM1-PFV-hold-FV 1-child
'dad held a child'
- b. baba a-da-**mu**-nyamul-a.
1.dad SM1-PFV-OM1-hold-FV
'dad held (her/him) the child'
- c. * baba a-da-**mu**_i-nyamul-a m-wana_i
1.dad SM1-PFV-OM1-hold-FV 1-child
Intd: 'dad held (her/him), the child'
- d. baba a-da-**mu**_i-nyamul-a, (m-wana)_i
1.dad SM1-PFV-OM-hold-FV 1-child
'dad has held (her/him), the child'

In example (23a) *mwana* 'child' is non-specific. The presence of the OM *-mu-* in (23b) means that this is an appropriate response to a question such as "What did dad do to the child?". The example in (23c) is ungrammatical because the object marker and the NP co-occur, which is prohibited in Cinyungwe. The example in (23c) shows that in Cinyungwe doubling an object marker with an *in situ* object is unacceptable in neutral discourse contexts. Note however that this sentence is acceptable in a context in which the speaker wants to convince the hearer that the action happened and s/he even saw father holding the child, i.e. for emphatic purposes or for certainty. The pause after the verb in example (23d) is obligatory and indicates that the NP is dislocated, and represents the only way such a sentence is acceptable in this context.

3.1.2 (ii) Is an object marker obligatory with particular object NPs?

The other aspect of variation with respect to the co-occurrence of the OM and the object argument found in Bantu languages relates to whether an object marker is obligatory with a specific object argument. In Cinyungwe, object marking is

not obligatory with specific object arguments of any type. See the examples presented below:

(24) Cinyungwe

- a. mw-ana a-da-won-a ng'ombe.
1-child 1SM-PFV-see-FV 9.cow
'the child saw the cow'
- b. mw-ana a-da-yi-won-a, (ng'ombe).
1-child 1SM-PFV-OM9-see-FV 9.cow
'the child saw it, (the cow)'

- (25) a. mw-ana a-da-won-a mu-ti.
1-child 1SM-PFV-see-FV 3-tree
'the child saw the tree'
- b. mw-ana a-da-wu-won-a, (mu-ti).
1-child 1SM-PFV-OM9-see-FV 3-tree
'the child saw it, (the tree)'

The examples presented above illustrate that in Cinyungwe the OM is not obligatory with a specific object argument because as can be seen (24) the object is an animate and in (25), the object is an inanimate. Nonetheless, the co-occurrence of non-animate NPs and object marker is related to definiteness or specificity. In (24), the object argument is animate while in (25), the object argument is non-animate.

However, in contrast to what we described in (24) and (25) above, object marking with the verb *-wona* 'to see' is obligatory. See the examples in (26) and (27) below.

- (26) a. a-da-??(mu)_i-won-a iye_i dzulo.
1SM-PFV-OM1-see-FV he yesterday
'he saw him yesterday'
- b. a-da-??(wa)-won-a iwo dzulo.
1SM-PFV-OM2-see-FV they yesterday
'they saw them yesterday'
- c. a-da-??(wa)-won-a yavu dzulo.
1SM-PFV-OM2-see-FV grandma yesterday
'they saw her (the grandma) yesterday'

- (27) a. a-da-**mu**_i-pas-a iye_i ci-mbamba.
 1SM-PFV-OM1-give-FV he 7-beans
 ‘he gave him beans’
 b. a-da-**wa**_i-pas-a iwo_i ci-mbamba.
 1SM-PFV-OM2-give-FV they 7-beans
 ‘he gave them beans’
 c. a-da-**mu**_i-pas-a ci-mbamba mayi.
 1SM-PFV-OM1-give-FV 7-beans 1.mother
 ‘he gave her (the mother) beans’

The data presented in (27) illustrate that in Cinyungwe object marking is obligatory with pronominal objects with the verb *-won-* ‘to see’. Moreover, examples (26c) and (27c) illustrate that the obligatoriness of the object marker in the verb may relate to the verb and not the pronominal object per se.

3.1.3 (iii) Are there locative object markers?

In Cinyungwe, locative objects can be expressed by locative object markers and they can co-occur with their overt locative nouns but not in neutral context. Consider the examples in (28):

- (28) a. pa-xikola_i, nd-a-(**pa**_i)-yend-a.
 16-school SM1SG-PFV-(OM16)-go-FV
 ‘to school, I (really) went to (there)’
 b. ku-muyi_i, u-ndza-(ku_i)-pit-a
 17-home SM2SG-FUT-(OM17)-pass-FV
 ‘home, you will (really) pass by (it)’
 c. * mu-nyumba u-da-**mu**-pit-a
 18-house SM2SG-PFV-OM18-pass-FV
 Intd: ‘inside the house, you will pass by’
 d. pa-xikola_i nd-a-*(**pa**_i)-won-a.
 16-school SM1SG-PFV-(OM16)-see-FV
 ‘school I saw (there)’

In (28a) and (28b), we see that only class 16 and 17 locative objects can be expressed by locative object markers on the verb and that locative object markers cannot co-occur with locative objects in the same clause. It is important to note that this co-occurrence happens when the speaker wants to express his or her

knowledge concerning an issue. In example (28c), class 18 cannot be expressed by a locative object marker in the verb structure while in (28d), omission of the object marker renders the sentence ungrammatical. This means that the verb *-wona* ‘to see’ requires an object marker.

3.1.4 (iv) Is object marking restricted to one object marker per verb?

Another parameter discussed in Marten & Kula (2012) that we focus on here concerns the number of object markers that can occur in an inflected verb structure. In Cinyungwe, only one object marker per inflected verb is permitted. See example (29):

- (29) a. mw-ana a-da-won-es-a Siriza mu-ti.
1-child SM1-PFV-see-CAUS-FV Siriza 3-tree
‘the child made Siriza see the tree’
b. mw-ana a-da-(***mu**)-**wu**-won-es-a, Siriza mu-ti.
1-child SM1-PFV-(OM9)-OM3-see-CAUS-FV Siriza 3-tree
‘the child saw it, (the tree)’
c. mw-ana a-da-(***wu**)-**mu**-won-es-a, Siriza mu-ti.
1-child SM1-PFV-(OM3)-OM1-see-CAUS-FV Siriza 3-tree
‘the child saw it, (the tree)’

Example (29b) illustrates that only one object marker is permitted. In this sentence the class 3 object marker occurs immediately before the verb root and (29c) shows that changing the order of the object markers does not alter the ungrammaticality of the sentence.

3.1.5 (v) Can either benefactive or theme objects be expressed by an object marker in double object constructions?

In Cinyungwe, either benefactive or theme objects can be expressed by an object marker in double object constructions. This is illustrated in the examples in (30).

- (30) a. Mayi a-da-**mu**-phik-ir-a ci-manga, Siriza.
Mayi SM1-PFV-OM1-cook-APPL-FV 7-maize Siriza
‘the mother cooked her (Siriza) maize’
b. Mayi a-da-ci-phik-ir-a Siriza, ci-manga.
Mayi SM1-PFV-OM7-cook-APPL-FV Siriza 7-maize
‘the mother cooked Siriza it (the maize)’

3.1.6 (vi) Is an object marker required/optional/disallowed in object relatives?

In Cinyungwe, object markers are generally optional in object relative clauses (31), although again it is not allowed to mark the object argument with the verb *-won-* ‘to see’ (31).

(31) ma-bvembe y-omwe mayi a-ndza-(ma)-bweres-a yanitapira ...
 6-watermelon REL-6 1.mother SM1-FUT-(OM6)-bring-FV sweet
 ‘the watermelons that mum shall bring (them) are sweet’

(32) ma-bvembe y-omwe mayi a-ndza-*(ma)-won-a yanitapira ...
 6-watermelon REL-6 1.mother SM1-FUT-(OM6)-see-FV sweet
 ‘the watermelons that mum shall see (them) are sweet’

The difference between the examples in (31) and (32) reflects the different object marking properties associated with different verb types in Cinyungwe. We do not explore the impact of the verb types on object marking properties in any further detail here although this would be a good avenue for future research.

It is important to note that verb types are not part of the Marten & Kula (2012) parameters and in this paper, we add verb types as seventh parameter. In terms of the parameters under examination here, the answers for Cinyungwe are “yes” for the five parameters (ii), (iii) and (iv), (v) and (vi) and “no” for (i) and (ii) (Table 1).

Table 1: Parametric variation in object marking in Cinyungwe

(i) Can the object marker and the object argument co-occur?	✗
(ii) Is an object marker obligatory with particular object NPs?	✗
(iii) Are there locative object markers?	✓
(iv) Is object marking restricted to one object marker per verb?	✓
(v) Can either benefactive or theme objects be expressed by an object marker in double object constructions?	✓
(vi) Is an object marker required/optional/disallowed in object relatives?	✓
(vii) Is an object marker obligatory with particular verb?	✗

After presenting data of object marking in Cinyungwe, in the next section we look at object marking in Citshwa.

3.2 Object marking in Citshwa

Citshwa is a Mozambican Bantu language with 693,386 speakers. Speakers are found in the three southern provinces Inhambane, Gaza and Maputo and in two central provinces Manica and Sofala (Ngunga & Faquir 2011). Citshwa has six dialects: Xikhambani, spoken in Panda District; Xirhonga, spoken in Massinga; Xihlengwe, spoken in Morrumbene, Massinga and Funhalouro Districts; Ximhandla, spoken in Vilankulo District; Xidzhonge (or Xidonge), spoken in Inharrime District; Xidzivi, spoken in Morrumbene and Homoine Districts. The data analyzed in this paper were provided by a speaker of the Ximhandla dialect via elicitation.

3.2.1 (i) Can the object marker and the object argument co-occur?

Ngunga (2014) shows that an object marker and the object argument can co-occur in Citshwa, and provides the examples in (33) to support this observation.

(33) Tshwa (S51) (Ngunga 2014: 187)

- a. Polina a-nyik-ile pawu ci-n'wanana
 Polina SM1-give-PFV 5.bread 7-child(a.small.one)
 'Polina gave the child some bread'
- b. Polina a-ci_i-nyik-ile ci_i-n'wanana_i pawu
 Polina SM1-OM7-give-PFV 7.child(a.small.one) 5.bread
 'Polina gave the child some bread'
- c. Polina a-ci-nyik-ile pawu
 Polina SM1-OM7-give-PFV 5.bread
 'Polina gave her bread'
- d. Polina a-gi-nyik-ile
 Polina SM1-OM7-give-PFV
 'Polina gave her (it)'

In (33a), there is no OM present in the verb structure. In (33b), the class 7 OM prefix is co-referential with the indirect lexical object NP *cin'wanana* 'child'. These examples show that when there are two objects, a direct and an indirect object, that it is the indirect object with which the OM in the verb structure agrees. It is also worth noting that the word order changes in such cases. While in (33a) the word order is S-V-DO-IO (subject, verb, direct object, indirect object), in (33b) the word order is S-V-IO-DO, which seems to suggest a locality (adjacency) principle in the agreement between the OM and the indirect lexical object. In

(33c), the indirect object noun is not realized but the construction is acceptable if it is part of a conversation where the referent can be recovered from context. This is also what happens in (33d) where the OM cross-references a class 7 noun.

In (34), we present another example which shows that there are important different pragmatic interpretations to be considered when the object marker and the object argument co-occur in an intransitive verb in Citshwa. According to our consultant, in example (34b), the co-occurrence of the object marker and the object argument does not appear out of the context. For him, any Citshwa speaker hearing this sentence out of the context can ask, “Which meat are you talking about?”, “Why are you telling me that?”. Thus, it seems like in (34b), we are talking about a specific meat. In Citshwa, OM-doubling brings this specificity and givenness reading of the object. That is why we propose that in Citshwa, the object and the co-referring direct object cannot co-occur out of the blue.

- (34) a. mu-fana w-a-g-a nyama
 1-boy SM1.PRS-eat-FV 9.meat
 ‘The boy eats the meat’
 b. mu-fana w-a-yi-g-a nyama
 1-boy SM1.PRS-OM9-eat-VF 9.meat
 ‘The boy eats the meat’

In Citshwa, there are cases where the co-occurrence of the object argument and the OM within the same sentence has a different meaning to the one described in (34b) above. Thus, if the speaker avoids the co-occurrence of the object argument and the object marker by dislocating the object argument, this results in emphasis on how the boy loves eating meat. An example of the co-occurrence of the object argument and the object marker and the resulting interpretation is shown in (35) below:

- (35) mu-fana w-a-yi-g-a, nyama
 1-boy SM1.PRS-OM9-eat-VF 9.meat
 ‘the boy eats a lot of meat’

The example in (35) can also have a totality interpretation when the speaker is telling the hearer not to be afraid thinking that the boy shall not finish the meat the hearer is giving him because as he knows, the boy loves meat and he can eat it with the bones.

3.2.2 (ii) Is an object marker obligatory with particular object NPs in Citshwa?

In Citshwa, animate as well as inanimate objects can appear with the object marker, although its presence is optional in both cases. See the examples in (36a–d), presented below.

- (36) a. Zabhela a-won-ile mbzana
Zabhela SM1-see-PFV 9.dog
'Zabhela saw a dog'
- b. Zabhela a-(yi)-won-ile mbzana
Zabhela SM1-(OM9)-see-PFV 9.dog
'Zabhela saw it'
- c. Tereza a-tsal-ile papilu
Tereza SM1-write-PFV 5.letter
'Teresa wrote the letter'
- d. Tereza a-(gi)-tsal-ile papilu
Tereza SM1-(OM5)-write-PFV 5.letter
'Tereza wrote it'

The examples presented in (36) above illustrate that object marking is not obligatory. That is, sentences in (36a–b) are still grammatical even if the object marker is not present. In (36c–d), where the object argument is an inanimate argument, we can see that the occurrence of the object marker in the verb structure is still not obligatory. The difference between these examples is that (36a) and (36c) are statements and (36b) and (36d) are context-based sentence structures. They are used to clarify what was not previously understood in the first statement. There is also another interpretation statement that can be added in the interpretation of (36b) and (36d). For our Citshwa speaker, the example in (36b) and (36d) can also be used for emphatic purposes where the speaker is trying to make clear how beautiful the words written in the paper were.

Thus, the OM may not be obligatory but the presence or absence of the OM changes the interpretation of each sentence.

3.2.3 (iii) Are there locative object markers?

In Citshwa, there are no locative prefixes of the form similar to the ones we described in Cinyungwe (cf. §3.1). Therefore, locativization is expressed by the suffix *-eni* attached to the NP. The examples in (37) illustrate that the locative object marker is only recovered from the verb for class 17.

- (37) a. ci-kolw-eni, u-ta-famb-a
 7-school-LOC SM2SG-FUT-go-FV
 ‘to school, you will go’
 b. ci-kolw-eni, u-ta-**ku**-famb-a
 7-school-LOC SM2SG-FUT-OM17-go-FV
 ‘to school, you will go there (wanting or not)’
 c. ndlw-ini, u-ta-nghen-a
 10-house-LOC SM2SG-FUT-enter-FV
 ‘in the house, you will get in’
 d. ndlw-ini, u-ta-(**ku**)-nghen-a
 10-house-LOC SM2SG-FUT-OM17-enter-FV
 ‘in the house, you will get in’

The absence of examples with locative object markers for class 16 and 18 in (37) indicates that Citshwa does not have OMs for these classes. The answer to this parameter from Marten & Kula (2012) is therefore “no” for Citshwa.

3.2.4 (iv) Is object marking restricted to one object marker per verb?

In Citshwa, only one object can be realised as an object marker for each inflected verb. See the examples in (38) and (39):

- (38) a. bava a-bhik-is-a zva-kuga nhanyana
 1.father SM1.PRS-cook-CAUS-FV 8-food 1.girl
 ‘the father made the girl cook the food’
 b. bava a-**mu**-bhik-is-a zva-kuga nhanyana
 1.father SM1.PRS-OM1-cook-CAUS-FV 8-food 1.girl
 ‘the father made her (the girl) cook the food’
 c. bava a-(***zva**)-**mu**-bhik-is-a zva-kuga nhanyana
 1.father SM1.PRS-(OM8)-OM1-cook-CAUS-FV 8-food 1.girl
 Intd: ‘the father made her (the girl) cook it (the food)’
 d. bava a-(***mu**)-**zva**-bhik-is-a zva-kuga nhanyana
 1.father SM1.PRS-(OM1)-OM8-cook-CAUS-FV 8-food 1.girl
 Intd: ‘the father made her (the girl) cook it (the food)’
 (39) a. mamani a-rim-el-a bava zvi-pfhaki.
 1.mother SM1.PRS-cultivate-APPL-FV 1.father 8-maize
 ‘the mother cultivates maize for the father’

- b. mamani wa-(***zvi**)-**mu**-rim-el-a bava zvi-pfhaki.
 1.mother SM1.PRS-(OM8)-OM1-cultivate-APPL-FV 1.father 8-maize
 ‘the mother cultivates it (the maize) for him (the father)’
- c. mamani wa-(***mu**)-**zvi**-rim-el-a bava zvi-pfhaki
 1.mother SM1.PRS-(OM1)-OM8-cultivate-APPL-FV 1.father 8-maize
 ‘the mother cultivates it (the maize) for him (the father)’

In (38) and (39), we have examples that illustrate that there is a space for only one object marker in the Citshwa verb structure.

3.2.5 (v) Can either benefactive or theme objects be expressed by an object marker in double object constructions?

In Citshwa, either the benefactive or theme object can be expressed by an object marker in double object constructions. This is illustrated by examples (40b) and (40c) below which illustrate that either the benefactive or the theme object can be object marked.

- (40) a. bava a-nyik-a ti-manga mu-nghana.
 1.father SM1.PRS-give-FV 10-peanuts 1-friend
 ‘the father gave the friend peanuts’
- b. bava wa-**ti**-nyik-el-a mu-nghana.
 1.father SM1.PRS-OM10-give-APPL-FV 1-friend
 ‘the father is giving them (the peanuts) on behalf of his friend’
- c. bava wa-**mu**-nyik-el-a ti-manga.
 1.father SM1.PRS-OM1-give-APPL-FV 10-peanuts
 ‘the father is giving the peanuts for him (the friend)’

This means that Citshwa is a “symmetrical” language with respect to object marking in double constructions (cf. Bresnan & Moshi 1990).

3.2.6 (vi) Is an object marker required/optional/disallowed in object relatives?

The last parameter presented by Marten & Kula (2012) has do to with the availability of object markers in relative clauses. In Citshwa, object markers are obligatory only with the verb *-won-* ‘to see’. Compare the examples (41) and (42).

- (41) a-ma-din'wa a-nga-(**ma**)-xav-a mamani ma-andziha
 AUG-6-orange SM1-PERF.REL-(OM6)-eat-FV 1.mother 6-sweets
 'the oranges that mother bought (them) are sweet'
- (42) a-madin'wa a-nga-*(**ma**)-won-a mamani ma-nandziha
 AUG-6-orange SM1.PERF.REL-(OM6)-see-FV 1.mother 6-sweet
 'the oranges that mother saw (them) are sweet'

The example presented in (41) illustrates that object markers are not obligatory in Citshwa. However, just like we saw when we were analyzing object marking in Cinyungwe, example (42), shows that it is obligatory to object mark the object argument in relative constructions in Citshwa. This can be related to what we described in section 3.2.1, in Citshwa the co-occurrence of the object marker and the object argument is disallowed, making them optional. Table 2 summarizes the object marking properties in Citshwa.

Table 2: Parametric variation in object marking in Citshwa

(i)	Can the object marker and the object argument co-occur?	✓
(ii)	Is an object marker obligatory with particular object NPs?	✗
(iii)	Are there locative object markers?	✗
(iv)	Is object marking restricted to one object marker per verb?	✓
(v)	Can either benefactive or theme objects be expressed by an object marker in double object constructions?	✓
(vi)	Is an object marker required/optional/disallowed in object relatives?	✓
(vii)	Is an object marker obligatory with particular verb?	✗

3.3 Object marking in Ciwutee

In the present section we look at Ciwutee, spoken by 259,790 people in the central province of Manica.

3.3.1 (i) Can the object marker and the object argument co-occur in Ciwutee?

As we saw for Cinyungwe and Citshwa in §3.1 and §3.2 above, in Ciwutee the object marker and the corresponding object argument cannot co-occur out of the blue. It seems like there is both a specificity/givenness component in OM-doubling. See the examples (43b) and (43d).

- (43) a. mhondolo y-a-rum-a mbudzi
 9.lion SM9.PFV-bite-FV 9.goat
 ‘the lion bit the goat’
 b. mhondolo y-a-yi-rum-a (#mbudzi)
 9.lion SM9.PFV-OM9-bite-FV 9.goat
 ‘the lion bit it (the goat)’
 c. mwaramu a-tem-a mu-ti
 1.brother-in-low SM1.PFV-cut-FV 3-tree
 ‘the brother-in-low cut the tree’
 d. mwaramu a-wu-tem-a (#mu-ti)
 1.brother-in-low SM1.PFV-OM3-cut-FV 3-tree
 ‘the brother-in-low cut it (the tree)’

The examples in (43b) and (43d) illustrate that in Ciwutee the object marker and the object argument cannot co-occur in neutral context regardless of the animacy of the object argument. In addition, our consultant also suggested that it seems like all lexical objects behave similarly in that the object marker is prohibited to co-occur with the *in situ* object argument out of the blue. According to our speaker, the examples in (43b) and (43d) reflect this specificity and givenness reading of the object. This is the reason a Ciwutee speaker hearing this sentence out of context can ask “Which goat or tree are we talking about”? or “Why are you telling me that?”. This restriction reminds us of what we described for Citshwa in §3.2.

Moreover, our consultant argued that there are contexts in which the examples in (43b) and (43d) presented above can be used by the speaker to illustrate that they have evidence, knows the person or the fact described, witnessed it (for more details about evidentiality in Bantu see Lippard et al. 2021). In such cases, the examples (44a) and (44b) repeated again from (43c) and (43d), can have the following translation in English.

- (44) a. mhondolo y-a-yi-rum-a (#mbudzi)
 9.lion SM9-PFV-OM9-bite-FV 9.goat
 ‘the lion certainly bit it (the goat)’
 b. mwaramu a-wu-tem-a (#muti)
 1.brother-in-law SM1SG.PFV-OM3-cut-FV 3-tree
 ‘the brother-in-law certainly cut it (the tree)’

As noted above, according to our informant, the Ciwutee speaker can use the OM-doubling structures to tell the hearer that they have evidence of what they

are talking about. The speaker is not expressing an opinion, they are telling the hearer what they know and so does not want to be challenged about the issue. If the other person insists, arguing about the same issue, this sentence can be used to say “hear what I am saying and let’s end the conversation”.

3.3.2 (ii) Is an object marker obligatory with particular object NPs?

As noted by Marten & Kula (2012) amongst others, Bantu languages differ with respect to the obligatoriness of co-occurrence of the OM with specific object argument. As has been described in a few other Mozambican Bantu languages such as Makhuwa (van der Wal 2015), Cuwabo (Guérois 2015) and Shimakonde (Ngunga et al. 2016), in some languages it is obligatory to object-mark class 1 and class 2 nouns (Makhuwa and Echuwabo) and animate objects (Shimakonde). This is not the case in Ciwutee where it is not obligatory to object mark particular objects. Example (45) illustrates that object marking is not obligatory with animate objects, while example (46) illustrates that object marking is not obligatory with inanimate objects.

- (45) a. nd-a-won-a Zhambato
 SM1SG-PFV-see-FV Zhambato
 ‘I saw Zhambato’
 b. nd-a-(**mu**)-won-a Zhambato.
 SM1SG-PFV-(OM5)-see-FV Zhambato.
 ‘I saw him (Zhambato)’
 (46) a. nd-a-won-a bhuku.
 SM1SG-PFV-see-FV bhuku
 ‘I saw the book’
 b. nd-a-(**ri**)-won-a bhuku.
 SM1SG-PFV-(OM5)-see-FV book
 ‘I saw it (the book)’

3.3.3 (iii) Are there locative object markers?

The presence or absence of locative markers in Ciwutee is the third parameter of variation examined by Marten & Kula (2012). Ciwutee has locative prefixes and they can be expressed by locative objects and similar to Cinyungwe, they can co-occur with their corresponding overt locative nouns. Consider the examples in (47):

- (47) a. ku-munda ndi-no-*(ku)-ziy-a.
 17-field SM1SG-PRS-(OM17)-know-FV
 ‘in the field of cultivation (there), I know’
 b. ku-munda ndi-no-(ku)-won-a.
 17-field SM1SG-PRS-(OM17)-see-FV
 ‘the field of cultivation I saw (it)’
 c. mu-mvura ndi-no-(mu)-pind-a
 18-marsh SM1SG-PRS-(OM18)-enter-FV
 ‘in the marsh, I enter!’
 d. pa-nyumba ndi-no-(pa)-gum-a
 16-home 1SM1SG-PRS-(OM16)-arrive-FV
 ‘at home, I arrive’

Ciwutee has the three locative object markers and they can be used to express locative objects. Examples (47a–d) show different verbs that illustrate that, in Ciwutee, locative objects can be expressed by locative prefixes. The examples also illustrate that it is obligatory to object mark locative objects when they occur in subject position. The verb *-won-* ‘see’ (47b) reminds us about what was described for Cinyungwe (example 28d) where we said that it was obligatory to object mark locative objects with the verb *-wona* ‘to see’.

3.3.4 (iv) Is object marking restricted to one object marker per verb?

Ciwutee allows only one object marker per inflected verb. This is shown in the examples in (48b) and (48c) which demonstrate that in the Ciwutee’s verb structure there is only one place for the OM.

- (48) a. mbiya a-pas-a huku ma-gwere
 1.grandma SM1.PFV-give-FV 9.chicken 6-maize
 ‘the grandma gave the chicken maize’
 b. mbiya *a-yi-ma-pas-a ma-gwere.
 1.grandma SM1.PFV-OM9-OM6-give-FV 6-maize
 ‘the grandma gave it (the chicken) maize’
 c. mbiya *a-ma-yi-pas-a huku
 1.grandma SM1.PFV-OM6-OM9-give-FV 9.chicken
 ‘the grandma gave it (the maize) to the chicken’

It is important to note that the ungrammaticality of (48b) and (48c) is not related to the order of the objects, rather it is a strict restriction on the number of object markers possible in a verb form.

3.3.5 (v) Can either benefactive or theme objects be expressed by an object marker in double object constructions?

Ciwutee allows either benefactive or theme objects to be expressed by an object marker.

- (49) a. Diminga w-aka-rim-ir-a mayi ci-mbamba.
 Diminga SM1-PFV-cultivate-APL-FV 1.mother 7-beans
 ‘Diminga cultivated beans for the mother’
- b. Diminga w-aka-**mu**-rim-ir-a ci-mbamba.
 Diminga SM1-PFV-OM1-cultivate-APPL-FV 7-beans
 ‘Diminga (really) cultivated for her (the mother) beans’
- c. Diminga w-aka-**ci**-rim-ir-a mayi.
 Diminga SM1-PFV-OM7-cultivate-APPL-FV 1.mother
 ‘Diminga (really) cultivated them (the beans) for the mother’

In (49a), the class 1 object marker (-*a*-) is co-referential with the object argument *mayi* ‘mother’ and in (49b), the class 7 prefix (-*ci*-) is co-referential with *cimbamba* ‘beans’. Therefore, just like in Cinyungwe and Citshwa, in Ciwutee either benefactive or theme objects can be expressed by an object marker. This means that, Ciwutee is also a “symmetrical” language.

3.3.6 (vi) Is an object marker required/optional/disallowed in object relatives?

Different from Cinyungwe and Citshwa, in Ciwutee object markers are optional in object relatives, even with the verb -*won*- ‘to see’.

- (50) a. nyumba ya nd-a-(**yi**)-won-a nja Mazvarira
 9.house REL SM1SG-PFV-(OM9)-see-FV COP Mazvarira
 ‘the house that I saw (it) belongs to Mazvarira’
- b. ma-khebe mayi a (a)-aka-(ma)-won-a akatapira
 6-watermelon 1.mother REL SM1-PFV-(OM6)-FUT-see-FV sweet
 ‘the watermelon that mother saw (it) was sweet’

The examples in (50a) and (50b) show that the verb *-won-* ‘to see’ does not need an object marker in the verb structure to render the sentence grammatical. Table 3 below summarizes what we have presented for object marking in the Ciwutee data so far.

Table 3: Parametric variation in object marking in Ciwutee

(i)	Can the object marker and the object argument co-occur?	✓
(ii)	Is an object marker obligatory with particular object NPs?	✗
(iii)	Are there locative object markers?	✓
(iv)	Is object marking restricted to one object marker per verb?	✓
(v)	Can either benefactive or theme objects be expressed by an object marker in double object constructions?	✓
(vi)	Is an object marker required/optional/disallowed in object relatives?	✓
(vii)	Is an object marker obligatory with particular verb?	✗

3.4 Object marking in Ciyaawo

After describing object marking in Cinyungwe, Ciwutee and Citshwa in the previous sections, in the present section we look at Ciyaawo data. Ciyaawo (P21 in Guthrie’s (1967–1971) classification) is a Mozambican Bantu language spoken by 454,185 people in the Mozambican northern province of Niassa.

3.4.1 (i) Can the object marker and the object argument co-occur?

In Ciyaawo, there are no restrictions of co-occurrence of the object argument and the OM within the same sentence, as illustrated in (51).

- (51) a. baaba a-dim-il-e yi-maanga.
 dad SM1-cultivate-PFV-FV 8-maize
 ‘dad has cultivated maize’
- b. baaba a-yi-dim-il-e.
 dad SM1-OM8-cultivate-PFV-FV
 ‘dad has cultivated it (maize)’
- c. baaba a-yi_i-dim-il-e yi-maanga_i
 dad SM11-OM8-cultivate-PFV-FV 8-maize
 ‘dad has cultivated the maize’

The examples in (51) are all grammatical and acceptable, although (51c) would probably be understood as emphatic to mean something like “dad has cultivated the maize very well”. On the other hand, an OM such as *-yi-*, as in the verb structure in (51b), is usually included in the verb structure to respond to a question such as “What did dad do to the maize?”.

3.4.2 (ii) Is an object marker obligatory with particular object NPs?

In Ciyaawo, there are no examples where the occurrence of OM is obligatory. That is, all transitive verbs can accommodate an object marker of any object NP regardless of their noun class. However, this is not obligatory under any circumstance.

- (52) a. n’nyamaata ju-dim-il-e yi-maanga.
 1.boy SM1-cultivate-PFV-FV 8-maize
 ‘the boy has cultivated maize’
 b. n’nyamaata ju-yi-dim-il-e.
 1.boy SM1-OM8-cultivate-PFV-FV
 ‘boy has cultivated it (maize)’
 c. n’nyamaata ju-yi_i-dim-il-e yi-maanga_i
 1.boy SM1-OM8-cultivate-PFV-FV 8-maize
 ‘boy has cultivated the maize’
- (53) a. ngweena ji-kamw-iil-e muu-ndu.
 9.crocodile SM9-grab-PFV-FV 1-person
 ‘the crocodile has grabbed a person’
 b. ngweena ji-n’-kamw-iil-e
 9.crocodile SM9-OM1-grab-PFV-FV
 ‘the crocodile has grabbed a person’
 c. ngweena ji-n’_i-kamw-iil-e muu-ndu_i.
 9.crocodile SM1-OM1-cultivate-PFV-FV 1-person
 ‘the crocodile has grabbed a person’

The examples (52a) and (53a) illustrate that in Ciyaawo, the OM is not obligatory with a specific object argument. That is to say that the presence of the OM in any transitive verb structures is not obligatory regardless of the class to which the noun belongs. When the OM occurs with the transitive verb, it may or may not co-occur with the lexical object seen in (52b, c) and (53b, c). The examples in (52b) and (53b) all correspond to questions like “What happened to the maize/

person?”, while the examples in (52c) and (53c) respond to open questions like “What has happened?”.

3.4.3 (iii) Are there locative object markers?

Just like in Cinyungwe and Ciwutee, in Ciyaawo, locative objects can be expressed by locative object markers and they can co-occur with the corresponding overt locative nouns. Consider the examples in (54):

- (54) a. pa-cikoola_i, n-gu-**pa**_i-won-a.
16-school SM1SG-PRS-OM16-see-FV
Lit. ‘at school, I see at’
Intd: ‘I see the place of the school’
- b. ku-musi_i, n-gu-**ku**_i-won-a
17-home SM1SG-PRS-OM17-see-FV
Lit. ‘to home, I see to (it)’
Intd: ‘I see there, the home’
- c. mu-nyumba n-gu-**mu**-won-a
18-house SM1SG-PRS-OM18-see-FV
Lit. ‘inside the house I see it’
Intd: ‘I see the interior of the house’
- (55) a. * pa-cikoola, n-gu-won-a.
16-school SM1SG1-PRS-see-FV
Lit. ‘at school, I see’
Intd: ‘I see the place of the school’
- b. * ku-musi_i, n-gu-won-a
17-home SM1SG-PRS-see-FV
Lit. ‘to home, I see to (it)’
Intd: ‘I see there, the home’
- c. * mu-nyumba n-gu-won-a
18-house SM1SG-PRS-see-FV
Lit. ‘inside the house I see it’
Intd: ‘I see the interior of the house’

In the examples in (54), the three locative prefixes are used as OM_s. In (55), the omission of the locative object marker in the verb structure renders the sentence ungrammatical. This means that the verb *-wona* ‘to see’, and other verbs with the same lexical properties, require the object marker regardless of the respective

noun class to render the sentence grammatical. In this language, locative prefixes therefore behave in the same way as any other noun class prefixes.

3.4.4 (iv) Is object marking restricted to one object marker per verb?

Another parameter discussed in Marten & Kula (2012) concerns the number of object markers that can occur per inflected verb structure. In Ciyaawo, only one object marker is allowed per inflected verb. Consider the examples in (56):

- (56) a. *mw-anace ju-ku-won-esy-a nguku yi-maanga.
 1-child SM1-PRS-see-CAUS-FV 9.chicken 8-maize
- b. mw-anace ju-ku-ji-(*yi)-won-esy-a nguku yi-maanga.
 1-child SM1-PRS-OM9-(OM8)-see-CAUS-FV 9.chicken 8-maize
 Lit: the child is making it (the chicken) see the maize.
 ‘the child is making the chicken see the maize’
- c. mw-anace ju-ku-(*yi)-(ji)-won-esy-a, nguku yi-maanga.
 1-child SM1-PRS-(OM8)-(OM9)-see-CAUS-FV 9.chicken 8-maize
 Lit: the child is making it (the chicken) see the maize.
 ‘the child is making the chicken see the maize’

The example in (56a) shows once again that, when inflected, the verb *-won-* ‘see’ cannot occur without the obligatory presence of the OM in its structure. The data in (56a, b) illustrate that only one object marker is permitted in the verb structure. That is, in Ciyaawo, the co-occurrence of two OMs in the verb structure is forbidden.

3.4.5 (v) Can either benefactive or theme objects be expressed by an object marker in double object constructions?

In Ciyaawo, different from Cinyungwe, Citshwa and Ciwutee, theme objects cannot be expressed by an object marker in an applied construction. That is, in this language, the only object marker that is allowed to occur in the verb structure is the benefactive as shown below:

- (57) a. Maama a-ku-n’-telec-el-a yi-maanga, mw-aanace.
 1.mother 1SM-PRS-OM1-cook-APPL-FV 8-maize 1.child
 ‘the mother is cooking maize for the child’
- b. *Maama a-ku-yi-telec-el-a Siriza, yi-maanga.
 1.mother 1SM-PRS-OM7-cook-APPL-FV Siriza 7-maize

The example (57b) illustrates that in Ciyaawo when the benefactive and the theme co-occur it is only the benefactive argument that can have a co-referent OM in the verb structure.

3.4.6 (vi) Is an object marker required/optional/disallowed in object relatives?

Ciyaawo functions as Ciwutee in relation to the use of object markers in object relatives which are generally optional, as illustrated in the following examples:

- (58) a. ma-ticiti ga c-aa-ci-(ga)-dy-a maama ga
 6-watermelon REL FUT-SM1-FUT-(OM6)-eat-FV 1.mother GEN
 ku-dyooop-a
 15-sweet-FV
 ‘the watermelons that mum shall eat (them) are sweet’
- b. *ma-ticiti ga c-aa-ci-won-a maama ga
 6-watermelon REL FUT-SM1-FUT-OM6-see-FV 1.mother GEN
 ku-dyooop-a
 15-sweet-FV
- c. ma-ticiti ga c-aa-ci-ga-won-a maama ga
 6-watermelon REL FUT-SM1-FUT-OM6-see-FV 1.mother GEN
 ku-dyooop-a
 15-sweet-FV
 ‘the watermelons that mum shall see (them) are sweet’

In Ciyaawo, the occurrence of the OM in the verb structure is optional (cf. 58a). It is important to note that the ungrammaticality of (58c) does not have to do with the absence of the OM in relative constructions as such, but with the fact that this verb is one which cannot occur without an OM.

Finally, we should add that, generally, optionality of the OM in the verb structure of most verbs is related to emphasis and what the speaker wants to express, as illustrated in (58). But this is different from (58c) which is marked as ungrammatical because of the specificity of the verb *-wona* whose structure requires the presence of an OM, be it in relative constructions or not.

3.4.7 (vii) Is an object marker obligatory with particular verbs?

In Ciyaawo, there are some verbs such as *-won-* ‘see’ and *-p-* ‘give’ which require an OM even if the lexical object occurs in the sentence. Object doubling

can occur with all transitive verbs. But its obligatoriness depends on the lexical properties of the verb. In (58) we have examples of verbs that must be categorized as [+OM] to which the lexical object is obligatorily added. This explains the ungrammaticality of (59a), (60a) and (61a).¹

(59) Ciyaawo

- a. *mw-anace ju-ween-i di-goombo.
1-child SM1.-see-FV 5-banana
- b. mw-aanace ju-**di**_i-ween-i di-goombo_i.
1-child SM1.1-OM5-see-FV 5-banana
'the child has seen the banana'
- c. mw-aanace ju-**di**-ween-i.
1-child SM1.1-OM5-see-FV
'the child has seen it'

- (60) a. *uwe tu-p-eel-e mw-aanace mi-teela.
We SM1PL-give-PFV-FV 1-child 4-tree
- b. uwe tu-**m**_i-p-eel-e mw-aanace mi-teela_i.
we SM1PL-OM1-give-PFV-FV 1-child 4-tree
'we have given the child the trees'
- c. uwe tu-**m**-p-eel-e mi-teela.
we SM1PL-OM1-give-PFV-FV 4-tree
'we have given him (the child) the trees'

- (61) a. *uwe tu-maany-i mw-aanace.
We SM1PL-know-(PFV) 1-child
- b. uwe tu-**m**_i-maany-i mw-aanace_i.
we SM1PL-OM1-know-(PFV) 1-child
'we have known him the child the trees'
- c. uwe tu-**m**_i-maany-i (mw-aanace_i)
we SM1PL-OM1-know-(PFV)- (1-child)
'we have known him (the child)'

In terms of the parameters under examination here, the answer for Ciyaawo is "yes" for all the parameters proposed by Marten & Kula (2012) except for (ii) and (v). Apart from that, we have shown that there are verbs like *-wona* 'see',

¹Here we have imbrication, a phenomenon where, in certain verbs, the past tense marker (*il-*) is not suffixed to the verb root, it is imbricated within the verb root to yield the form *-ween*.

-*pa* ‘give’, -*manyá* ‘know’ which are characterized by the obligatory presence of OM in their structure. We suggest that these verbs should be subcategorized as [+OM]. Table 4 summarizes object marking properties in Ciyaawo.

Table 4: Parametric variation in object marking in Ciyaawo

(i) Can the object marker and the object argument co-occur?	✓
(ii) Is an object marker obligatory with particular object NPs?	✗
(iii) Are there locative object markers?	✓
(iv) Is object marking restricted to one object marker per verb?	✓
(v) Can either benefactive or theme objects be expressed by an object marker in double object constructions?	✗
(vi) Is an object marker required/optional/disallowed in object relatives?	✓
(vii) Is an object marker obligatory with particular verbs?	✓

3.5 Summary

This section has examined the morphosyntactic properties of object marking in four Mozambican languages taking into consideration Marten & Kula’s (2012) parameters, as summarized in Table 5.

To summarise, only three from the seven parameters (ii), (iv) and (vi) have the same responses across all languages, parameter (ii) for which the value is NO across all languages of our sample and parameters (iv) and (vi) for which the value is YES across our sample. The four remaining parameters have one language whose response is different from the response of the other languages regardless of whether it is NO for Cinyungwe (i), Cithswa (iii), Ciyaawo (v) or YES for Ciyaawo (vii). Ciwutee is the only language which does not have any feature which is specific to it. This means that considerations like the language contact, multilingualism and language classification alone do not help to explain similarities or differences among the languages according to the different parameter values.

Considering the data from the four languages, we suggest that the obligatory requirement for an object marker [+OM] associated with some transitive verbs and structures should be added as a seventh parameter to the six parameters of variation in object marking in Bantu put forward by Marten & Kula (2012). Due to the existence of transitive verbs subcategorized as [+OM], we further encourage scholars to examine these parameters of variation in other Bantu languages in light of these features of variation.

Table 5: Object marking in the four analyzed Mozambican Bantu languages following Marten & Kula (2012)

Parameters of variation from Marten & Kula (2012)	Languages of the present study			
	Ciyaawo	Ciwutee	Cinyungwe	Tshwa
(i) Can the object marker and the object argument co-occur?	✓	✓	✗	✓
(ii) Is an object marker obligatory with particular object NPs?	✗	✗	✗	✗
(iii) Are there locative object markers?	✓	✓	✓	✗
(iv) Is object marking restricted to one object marker per verb?	✓	✓	✓	✓
(v) Can either benefactive or theme objects be expressed by an object marker in double object constructions?	✗	✓	✓	✓
(vi) Is an object marker required in object relatives?	✓	✓	✓	✓
(vii) Are there verbs whose inflection obligatorily require an OM in inflectional structure?	✓	✗	✗	✗

4 Conclusions

This paper has discussed object marking in four Mozambican Bantu languages, Cinyungwe, Citshwa, Ciwutee and Ciyaawo, based on Marten & Kula's (2012) parameters. In contrast to Ciyaawo, in Cinyungwe, Citshwa and Ciwutee the co-occurrence of the lexical object and OM in the same sentence is not allowed. Specifically, in Cinyungwe, the co-occurrence of the overt subject NP and the OM within the same sentence can happen only if the object is not *in situ*. In Ciwutee the co-occurrence of the object marker with the overt NP is allowed except in cases of emphasis or communicative strategies. In Citshwa OM-doubling the object marker and object argument results in a definiteness reading. The data illustrate that OM-doubling in Cinyungwe and Ciwutee is associated with an evidential reading, in a sense that the speaker is telling the hearer that s/he is sure of what s/he is talking about and so, s/he does not want to be contradicted (see Lipard et al. 2021 for more on this issue). On the basis of the data presented here, we also suggest that the feature [+OM] for some transitive verbs like *-manya* 'know', *-pa* 'give' and *-wona* 'see' should be added as the seventh parameter to the six parameters put forward by Marten & Kula (2012).

This research shows that of the four languages, only Ciyaawo has the value YES for the parameter (vii). Linking the Ciyaawo response for this parameter to what is happening in the relative constructions in the other three languages analyzed in this paper, we suggest that the verb *-wona* 'see' may have lost its [+OM] feature and remained only in the relative sentences. We need to undertake more research on this issue to check if we can find a trace of this feature in these languages using similar or other verbs because in Kilunguru (G30), for example, OM is obligatory with similar verbs *-ona* 'see'; *-ing'a* 'give' and with a different verb *-phika* 'find'.

Overall, this chapter has contributed to our understanding of the morphosyntax of four Bantu languages spoken in Mozambique, the broader properties of object marking in Bantu languages, as well as the use of a parametric approach (following Marten & Kula (2012)) to better understand variation within Bantu.

It has been noted that our aim was to discuss the Marten & Kula (2012) six parameters in four Mozambican languages. In the course of this, we have found a number of areas which require further investigation and attention. We leave for future work the discussion about the impact of the verb type on object marking, syntactic status of the OM, and (a)symmetry in double object constructions in the four languages analyzed in this paper.

Abbreviations

The following glosses are used in addition to the Leipzig Glossing Rules:

1, 5, 7, 9, 10 ...	noun classes
FV	Final Vowel
Intd.	Intended meaning
OM	Object Marker
SM	Subject Marker
PFV	Perfective
PRS	Present
i	co-reference

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