Copular Constructions in Makhuwa-Enahara

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1.0 List of Abbreviations

´	high tone
`	low tone
|	pause in speech
1,2,3	Noun Class 1, 2, 3, etc
1P	first person plural
1SG	first person singular
2PL	second person plural
2SG	second person singular
AUG	augment
CAUS	causative
cf	citation form
CJ	conjoint
COMP	complementizer
CON	connective
COP	copula
CP	complementizer phrase
DEM	demonstrative
DIST	distal
DJ	disjoint
DP	definite phrase
DUR	durative
e	individual/referent
e,t	predicate
EQ	equational
EXPL	expletive
EXT	extension
FUT	future
FV	final vowel
H	high tone
ID	identificational
IL	Individual Level
INF	infinitive
INV	invariant
IP	inflectional phrase
L	low tone
LOC	locative
MED	medial
N	homorganic nasal
NEG	negation
OM	object marker
PASS	passive
PAST	past
PFV	perfective
PL	predicative lowering
POSS	possessive
POST	post final position
PRED	predicational
PRES	present
PRO	pronoun
PROX	proximal
PRS	present
REF	referential
REL	relative
RM	relative marker
SIT	situative
SL	Stage Level
SM	subject marker
SPEC	specificational
Spec	Specifier
t	trace
TAM	tense-aspect-mood
TopP	Topic Phrase
vP	verb phrase
X’	X-bar
XP	X Phrase

Contents

2.0 Introduction

This paper aims to describe the structure, semantics, and variation of copular constructions in Makhuwa-Enahara. The language at hand is the Enahara variant of Makhuwa, a Mozambican Bantu language, Guthrie code P31E (Maho, 2009). Makhuwa-Enahara is a language of approximately 35,000 to 40,000 native speakers, according to the most recent count available (Kröger, 2005). These speakers are found on the Mozambican mainland around Nampula, as well as on Ilha de Moçambique, though speakers in the latter location are often said to speak a more "pure" variant while speakers on the mainland mix Enahara with other variants (Kröger, 2005). Speakers of Makhuwa-Enahara are reportedly fully capable of understanding the central Makhuwa variant, Makhuwana, on which Makhuwa orthography is based, though are conscious and proud of the differences between their language and Makhuwana (Kröger, 2005; Van der Wal, 2009). According to a 2005 survey by Kröger, most speakers of Makhuwa-Enahara also have some familiarity with Swahili and Arabic, the latter largely due to exposure through Islamic traditions, as well as Portuguese, which is the national language of Mozambique (Kröger, 2005; Ethnologue, 2022). For ease of reading, I will use the terms Makhuwa and Makhuwa-Enahara interchangeably in this paper, though at this time I make no claim about the applicability of my arguments to the wider Makhuwa continuum, unless otherwise stated. The data used for this research was collected by Jenneke van der Wal, primarily during a series of field trips to Ilha de Moçambique, with approximately nine speakers aged 26 to 76, though a limited number of examples were collected *ex situ* for the specific purpose of this paper. The majority of the cited examples are stored in an online Dative database, the rest are found in a FileMaker Pro database, both of which are maintained by Jenneke van der Wal.

This paper will focus on describing the possible predication strategies in Makhuwa-Enahara and under what circumstances they occur. This will involve a discussion of the different copular clause types within Makhuwa-Enahara and give evidence for the set division argued for (settling finally on five underlying types of predication: Predicational, Specificational, Identificational, Equational, and Locative; though only Specificational and Locative pattern separately from the rest in the present and arguments could be made for the theoretical usefulness of collapsing the other types). This is important to this paper because I will argue that the primary factor influencing choice of predication strategy in Makhuwa-Enahara is not part of speech as previously suggested by Van der Wal (2009) but instead the underlying type of predication. I will do this by first presenting the three predication strategies in Makhuwa-Enahara with a brief explanation of their surface forms. I will present Van der Wal's argument and examples supporting it, followed by examples which cannot be explained according to Van der Wal's analysis. I will then present these same examples with reference to the predication type rather than the part of speech and show that this alternative focus explains the exceptions which cannot be accounted for when taking into account only part of speech. I will conclude this paper with a depiction of the tree structures underlying each of these forms, and a short discussion of the implications of their differing structures.

The debate around copular constructions is extensive (with little overarching consensus) though much of the current work centers around Indo-European languages, an unsurprising but disappointing state, and thus this description hopes to give a different perspective to the wider discussion, contributing further to our understanding of the possible interlinguistic differentiations of "being." Additionally, this paper will further the description of Makhuwa-Enahara, and possibly help to shed light on the Information Structure of the language.

3.0 Background

In order to better facilitate the arguments of this paper, I will first give a background on the relevant phonological and morphosyntactic structures of Makhuwa (3.1), with special reference to the basic tonal system, Noun Class agreement in the language, and the Conjoint/Disjoint variation. I will also attempt to contextualize these structures within the Bantu language family and highlight relevant works to date. I will then try to give a brief background of the debate surrounding copular clauses as it currently stands (3.2), once again with special regard to Bantu.

3.1 A Brief Sketch of Makhuwa-Enahara

Makhuwa-Enahara has a distinction between long and short vowels as well as geminate and nongeminate consonants (Van der Wal, 2009). The former contain two moras, while the latter contains only one. Long vowels and geminates in this draft are written with two characters ([aa] as opposed to [a:]) in order to more easily represent tone. Makhuwa does not have automatic penultimate lengthening as in some other Bantu languages. Makhuwa has a high rate of liaison, or resyllabification of a word final vowel and any associated tones onto the following word, especially within a noun phrase; liaison is shown in this draft with an apostrophe in place of the resyllabified vowel. Because of the high rate of liaison, many examples in this paper are shown with a four level interlinear gloss as opposed to a three level.

Makhuwa has a two-level tone distinction, H(igh) and L(ow), with some variation in the actual phonetic realizations of the two (Van der Wal, 2009). Tones surface on the nucleus of the syllable, which can be a vowel, nasal, or the first mora of a geminate consonant. All nominal items have an underlying tone pattern while verb stems do not necessarily, though this is (as will become woefully apparent) affected by the grammaticality as well. As is common in Bantuist tradition, H tones in this paper will be shown with an acute accent, and L tones will remain unmarked. Examples of this presentation are given in (1).

1 (Van der Wal, 2009 p. 28: Ex. 65)

ekháráre	hair	LHHL
ekattáka	hide	LLHL

Nouns in citation form do not usually end with a final H, though one can be introduced when a predicated noun is in a phrase final position, or a H may spread from the previous mora, in a process known as High Tone Doubling (HTD). Phrase final words (with the exception of predicatively lowered nouns and certain verbal conjugations, see Van der Wal (2009) for further discussion of these specific tonal environments) undergo Final Lowering, which is a deletion of the phrase final H, including any surface level H's connected to it as a result of HTD. When the penultimate syllable of the phrase final word is long, the surface representation depends on the underlying tone of each mora of the penult. If the first mora is H but not the second, the tone pattern will appear as HL followed by a L on the final syllable giving a HL.L pattern to the final two syllables. This deletion is referred to by Cheng and Kisseberth as Long Fall (Cheng & Kisseberth, 1979). However, if the second mora of the penult is also underlyingly H, then it will remain H and only the final syllable will be lowered, resulting in a HH.L pattern on the final two syllables.

As is common among Bantu languages, Makhuwa-Enahara has an extensive Noun Class system with obligatory agreement on almost every part of a clause. The nominal prefix shows which class a noun belongs to, for which almost all other elements must inflect, including the

verbal markers and demonstratives. Classes 1 and 2 (including 1st and 2nd persons) require an object marker, all other classes do not. All verbs have an obligatory subject marker, even when the subject is prodropped. A table of the Makhuwa noun class inflections for subject and object marking as well as demonstrative agreement is given in (2) for reference.

2 Based on Van der Wal (2009)

Class	Nominal Prefix	Subject Marker	Object Marker	Dem. Prefix
1SG		ki-	-ki-	
2SG		o-	-u-	
1P		ni-	-ni-	
2P		N-/mw-/mwi-	-u-…-ni	
1	N-/mw-/∅	o-/a-	-N-	ó-
2	a-	a-	-a-	á-
2a	á-	a-	-a-	á-
3	N-/mw-	o-		ó-
4	mi-/mw-	tsi-		í-
5	ni-/n-/N-	ni-		ń-
6	ma-	a-		á-
9	e-	e-		é-
10	e-	tsi-		í-
14	o-	o-		ó-
15	o-	o-		
16	va-, wa- (…-ni)	wa-		v-
17	o- (…-ni)	o-		ń-/ű-
18	N- (…-ni)	N-/mw-/mwi-		m-/ḿ-

Makhuwa-Enahara is an agglutinative language with a complex verbal morphology. Verbal prefixes maximally show negation, subject marking, TAM, and object marking, while the verbal stem includes the root, verbal extensions, and a verb ending.

The most important part of Makhuwa verbal structures for the purpose of this paper is the Conjoint/Disjoint alternation. Conjoint/Disjoint (CJ/DJ) is the name for a verbal alternation first noted by Meeussen, in which certain conjugations are paired in tense and aspect but differ in relation to the postverbal element (Van der Wal & Hyman, 2017). The CJ/DJ alternation is present across a wide swath of Eastern Bantu languages with significant variation between occurrences. The general gist of the two forms when put into a cross-Bantu perspective is that the Conjoint form has a closer relationship to the postverbal element, while the Disjoint has a much weaker relationship or may not have a postverbal element at all.

In Makhuwa, the Conjoint form more specifically gives the postverbal element an exclusive focus, while the Disjoint form does not, as shown in (3). The Conjoint form also triggers a tonal alternation on the postverbal element in Makhuwa, called Predicative Lowering, shown in (3).

3 (Van der Wal, 2006 p. 227) adapted

citation form: nakhúwo ‘maize’			(LHL)
DJ	ki-ná-ń-thítá	nakhúwo	(LHL)
	1SG-PRES.DJ-1OM-pound	1a.maize	
	‘I pound maize.’		

CJ	ki-ni-ń-thítá	nakhuwó	(LLH)
	1SG-PRES.CJ-1OM-pound	1a.maize	
	'I pound *maize*.'		

Predicative Lowering as shown here is formally identical to one of the primary nonverbal predication tactics found in Makhuwa-Enahara. The term was coined by Schadeberg & Mucanheia (2000) to describe the nonverbal predication strategy in Ekoti, though it has since been used more broadly to describe similar occurrences (including lowering triggered only by CJ/DJ without any predicational meaning) in multiple of the P30 zone Bantu languages, including neighboring Makhuwa-Esaka (Katupha, 1983), Cuwabo (Guérois, 2015), and Shangaji (Devos, 2018). Devos, however, does use the term "focus lowering" to refer to lowering following a Conjoint form in Makwe, where the same lowering is not found as a predication strategy (Devos, 2008; 2018).

Van der Wal (2006) attributes this tonal alternation to a historic deletion of the Bantu (proto-) augment (also called the nominal pre-prefix) as a show of non-genericness, which would also delete the H tone that came with it. This case is strengthened when compared to (Eastern) Bantu languages like Luganda, in which the augment and its H are still present but may be deleted to show focus (4). With the exception of Luganda's lack of verbal CJ/DJ alternation, the environments which show augment deletion are identical to those in which we find Predicative Lowering in Makhuwa.

4 Luganda (Van der Wal, 2006 pp. 230 citing: Hyman & Katamba, 1993)

a.	ya-gúla	ebí-tábó
	1.PAST-buy	8-books
	'He bought books.'	

b.	ya-gúla	bi-tábó
	1.PAST-buy	8-books
	'He bought *books*.'	

The hypothesis proposed by Van der Wal, which I will also adopt for the duration of this paper, is that the historic H of the augment has merged with the tone of the proto-Bantu (or more likely proto-Makhuwa) noun stem to provide the current, augmentless, citation form of Makhuwa nouns (2006 p. 230). The process of augment deletion to show non-genericness has thus also merged with the noun stem and deletes the initial H of the stem, whether or not the specific lexeme can be reconstructed to a proto-form with the augment. In other words, the tonal deletion remains and now applies to any initial H of the noun. The productivity of this function can be shown through its use with proper nouns and borrowings (5), which would not have been present at the time of the proto-augment (Van de Velde, 2019).

5

naáta	nithummé	ekoopo	tsikháani	cf. ekópó
naata	ni-thum-ale	ekoopo	tsi-khaani	
no	1P.SM-buy-PFV.CJ	10.cups	10-small	

'No, we bought small cups (not big cups).'

It is of note that locatives are the only nominals which consistently do not undergo Predicative Lowering following a conjoint verb.

6 (Van der Wal, 2006 p. 227)

ki-n-thít-á	nkíntáále
ki-n-thít-á	*nkintaalé
1SG-PRES.CJ-pound-FV	18.compound

'I pound on the compound.'

Makhuwa-Enahara distinguishes Conjoint and Disjoint forms in only its "basic" conjugations, namely: present, present perfective, past imperfective, and past perfective, as well as their negative counterparts (Van der Wal, 2009).

3.2 The Copula Conversation

There is much discussion surrounding nonverbal predication and copular constructions cross-linguistically, and while there is consensus on very little, I will attempt to put forth those points which are widely believed to be true along with their justification; I will also give a brief discussion of a few of the works upon which this paper and the analysis within draw most heavily.

3.3 The Concept of Copulas

The concept of copulas has been around for a long time, and yet continues to defy attempts at definition. Arche, Fábregas, and Marín (2019) in their recent publication discuss at length the differences between copular constructions not only cross-linguistically, but even within one language, floating previously posited definitions anywhere from "(i) copulas carry verbal inflection, (ii) copulas appear in contexts where the predicate is nonverbal, (iii) copulas are elements used to link the predicate and the subject—as the term itself suggests—from Latin copula 'link,' and (iv) copulas are semantically light, possibly empty" to "A copular element is an element needed to define a predication structure"[1] (Arche, et al., 2019 pp. 3, 6). The latter definition is that which I will *de facto* adopt for the duration of this paper. While it may at first seem a flippant description, it is in fact possibly the most specific one can be without delimiting so far as to exclude many types of copulas.

Take Swahili (G41-43; Maho, 2009) as an example. There are four types of copula in Swahili: an invariant "pure" copula (7a), a possessive copula which inflects for the noun class of the possessor (7b), a locative copula which inflects for the subject of the construction as well as the locative type (7c), and a verbal copula used for non-present constructions (7d) (Marten, 2013; Schneider-Zioga, 2019).

7

a.

Juma	ni	mw-alimu
Juma	COP	1-teacher

'Juma is a/the teacher.'

b.

Juma	a-na	wa-nafunzi	wa-tano
Juma	SM1-POSS.COP	2-student	2-five

'Juma has five students.'

[1] It is important to note that this definition does specify the *definition* of a predication structure rather than *being* a predication structure. This excludes elements which satisfy the requirements of a predicate on their own, namely full or "normal" verbs.

c. shule i-ko m-ji-ni
9.school SM9-LOC.COP17 3-town-LOC
'The school is in town.'

d. a-li-kuwa mw-alimu
1SM-PAST-be 1-teacher
'S/he was a teacher.'

(7a) shows that no verbal inflection is necessary for a copula, as no inflection whatsoever occurs on the copula used, contrary to the first of the description given by Arche et al. (7d) similarly invalidates (ii) of said description, as the copula in question is fully verbal, as it shows verbal tense and aspect marking typical of the language at hand. Furthermore, the sheer array of possible specific copulas, between which can be found specific sub-meanings (i.e., possessive, locative, etc.) makes (iv) a more precarious stance to take as well. This leaves only (iii) uncontested by the examples in (7). In light of these points against the first definition, "A copular element is an element needed to define a predication structure" feels much more accurate indeed.

3.4 Nonverbal Predication Types

A still debated point within copular literature is the number of different constructions a copula can define. That is, what predicate–subject combinations fall within the realm of nonverbal predication and how they are divided at the most underlying level. The divide between copular construction types depends on which side is more referential (identifies the referent or subject[2] of the statement) and which is more predicative (provides information about the referent).

Higgins (1979) defines four underlying types of predication: Predicational, Equational, Specificational, and Identificational, illustrated in (8). In this format, <e> refers to an individual or referential statement, while <e, t> is a predicative clause.

8

Predicational	<e>	COP	<e, t>
Specificational	<e, t>	COP	<e>
Identificational	DEM	COP	<e>
Equational	<e>	COP	<e>

Mikkelsen (2005) argues that any Identificational statement with a demonstrative subject (ex: "That is Nicholas.") should be collapsed as a subset of Specificational predication, as the post-copular position is clearly referential being a name, while the pre-copular demonstrative "that" implies a non-human entity and thus is inherently non-referential. Notably, constructions in Makhuwa-Enahara cannot share that exact line of thought because demonstratives inflect for noun class, meaning the demonstrative would be inflected for Class 1, i.e., a class primarily for humans and other living things. While this point can be made for Makhuwa-Enahara, some Bantu languages do subsume Identificational constructions into Specificational, like Kinande (Schneider-Zioga & Mutaka, 2015).

Other scholars have argued that there are only two construction types, depending on which side of the copula is more referential (Heggie, 1988; den Dikken, 2006), or that no two

[2] "Subject" here refers to who or what the statement is about, rather than the canonical Subject/Predicate juxtaposition.

phrases can be truly equational and so that category must be collapsed (Moro, 1997), or that the construction types shown in (8) should be even further divided (Declerck, 1988). Part of the reason for this lack of consensus is due solely to difficulties in finding a satisfiable analysis cross-linguistically.

The other main aspect of debate concerns how these different predication types are related to one another. While some authors claim each of these four types to be entirely separate (Heycock & Kroch, 1999), many have proposed that Specificational constructions are simply inverse Predicational structures, i.e., they have the same underlying tree but different surface orders due to constraints on the subject position (Mikkelsen, 2005; Moro, 1997; Heggie, 1988).

The importance of this debate lies in the fact that not all nonverbal predicates are expressed in the same manner. While English uses just one copula – *to be* – which is negated with the standard verbal negator *not*, Bantu languages tend to use several different strategies. Gluckman (2022 p. 23) finds a four-way split between copulas in Kihavu (JD52) based on the type of predication, shown below in (9).

9

	English	Kihavu
Predication (SL)[3]	be	-li
Predication (IL)	be	-ba
Specification	be	-o
Equation	be	-o
Identification	be	∅

Similarly, the predication strategy used may be dependent upon the syntactic nature of the post copular element, i.e., what part of speech is being predicated. Across Bantu languages, it is common to find nominal and adjectival predication patterning together, while locative predication requires a separate strategy, or adjectival and locative constructions pairing together with nominal predicates following a different strategy. The former is shown in (10) for Kinyarwanda (JD61) (Jerro, 2015 cited in Schneider-Zioga, 2019 p. 4 ex: 10 & 11).

10

a. Kyle n' umwarimu — Nominal
Kyle NI teacher
'Kyle is a teacher.'

b. Kyle ni mu-nini — Adjectival
Kyle NI 1-big
'Kyle is big.'

c. Mukamana a-ri mu rogo — Locative
Mukamana 1S-COP in house
'Mukama is at home.'

Similarly, Gibson et al. (2019) note that in their micro-typological survey of Bantu copulas that they find nominal predicates to be the least restricted of all complement types. However, this could also be due to noun phrases' ability to be used as predicational or referential or both.

[3] SL and IL here refer to Stage Level and Individual Level attributes, temporary and permanent attributes, respectively.

These factors have all been kept in mind during the following discussion of Makhuwa-Enahara and have been addressed from the surface level description proceeding to the underlying structures.

4.0 Predication Strategies in Makhuwa-Enahara

There are three types of copular constructions in Makhuwa-Enahara: Predicative Lowering, the Invariant Copula *ti*, and the Verbal Copulas *-ri* and *-khala (*infinitive forms: *ori* and *okhala).* In the following section I will discuss each predication strategy at length, describing the surface forms of the predication strategies.

4.1 Predicative Lowering

Predicative Lowering involves the deletion of the initial High tone of the predicate, in a process identical to that discussed in (3.1) for objects following a Conjoint verb form. When a word in the phrase final position would then become all Low, a High may then be inserted on the final vowel of the affected element (Van der Wal, 2009). Predicative lowering is found as a predication strategy in nominal, locative, and adjectival predicates, as well as predicates using the question word 'what.' Van der Wal calls Predicative Lowering the default nonverbal predication strategy, saying: "For nouns which have the option of expressing predication by means of PL, this is the only strategy allowed" (2009 p. 121).

Nominal elements which can undergo Predicative Lowering include common nouns (11a) (including professions (11b)), and names (11c).

11

a. wé nlattú — cf. nláttu
we nlattu
2SG.PRO 2.problem.PL
'You are the problem.'

b. ólé porosoorí — cf. porosóóri
ole porosoori
1.DEM.DIST 1.teacher.PL
'S/he is a/the teacher.'

c. ólé Aniitú — cf. Anítu
ole Anitu
1.DEM.DIST Anitu.PL
'That is Anitu.'

Notably, when the predicated element is a phrase consisting of more than one word, only the first word of the phrase is lowered (12).

12

a. élá **shtoriya** ya náńnaánó | élá **shtoriya** ya khálái[4] — cf. shtóríya

ela	shtoriya	e-a	nannaano	ela	shtoriya	e-a	khalai
9.DEM.PROX	9.story.PL	9-CON	now	9.DEM.PROX	story.PL	9-CON	old.times

'This is a new story, this is an old story' lit. 'This is a story of now, this is a story of old times.'

[4] In order to ease reading of longer examples, I have boldfaced relevant elements here and in other example sets.

b. mwalápwá **enamá** ya mwettó miceshé
mwalapwa enama e-a mwetto mi-ceshe cf. enáma
1.dog 9.animal.PL 9-CON 4.legs 4-four
'The dog is an animal with four legs.'

Makhuwa-Enahara has two main strategies for adjectival constructions, inflecting adjectives that agree with the noun (13a) and nouns or verbs headed by a connective that agrees with the noun (13b).

13

a. kinrórusá minyoótsó tsuúlúpale
ki-nro-rus-a mi-nyootso ts-ulupale
1SG.SM-FUT-pee-FV 4-pee 4-big
'I'm going to pee a big pee.'

b. ntátá náka ti noóríirya
n-tata n-aka ti ni-a o-riirya
5-hand 5-POSS.1SG COP 5-CON 15-be.cold
'My hand is cold.'

Between these two construction strategies, only inflected adjectives obligatorily undergo Predicative Lowering (14), while constructions that normally have a connective may not undergo PL. There are a few exceptions, in which a word that is often used as an inflected adjective (15b) can also be used as a noun with a connective (15a).

14

a. eparáthú yankhaáni cf. yáńkhaáni
eparathy e-ankhaani
9.plate 9-small.PL
'The plate is small.'

b. ekólé (nléló) ekithí
ekole nlelo e-kithi cf. ekíthi
9.coconut still 9-unripe.PL
'The coconut is still unripe.'

15

a. ehóp' éelá ti ya safáráwo
ehopa ela ti e-a safarawo
9.fish 9.DEM.PROX COP 9-CON yellow
'This fish is yellow.'

b. ehóp' éelá safarawó
ehopa ela safarawo
9.fish 9.DEM.PROX yellow.PL
'This fish is yellow.'

Locative predicates that undergo Predicative Lowering are limited to constructions in which the subject and predicate are both locatives (16), and cleft constructions (17).

16

o-n-thíkíla	mithálí	owány'	áw'	onakhalá
1-PRES-cut.REL	4.tree	14.home	1.POSS	17.Nacala.PL

'He who cuts trees, his home is Nacala.'

17

o-ri	miláttú	onsiriri /	mphiro=ní
17-be	4.problems	17.Mossuril.PL	18.street.PL=LOC

'The place where there are problems is Mossuril/on the street.'

This is further noteworthy, as locatives do not lower following conjoint verbs (18).

18

ki-tthyawel-alé	mparása / *mparasá
1SG-ran-PFV.CJ	18.fortress

'I ran to the fortress.'

4.2 The Invariant Copula

The invariant copula has the form *ti*, but in Classes 4 and 10 it surfaces as *pi*, identical to the neighboring language Makhuwa-Esaka (Katupha, 1983; Van der Wal, 2009). In the current database, all examples in which the copula surfaces as *pi* are either constructions headed by a connective or relative constructions, though this may be due more to chance than rule.

The invariant copula is used for predication of nominal and adjectival constituents, but we do not currently have any examples of the invariant copula in locative constructions, despite Van der Wal's descriptions of them. There are a few examples with a locative as the subject of the predication, but none as the predicate itself. The invariant copula is also used for questions with 'who' *pani* and the introduction of relatives. Elements which can act as a subject for the invariant copula seem to be almost unrestricted, including nouns, adjectival constructions, relatives, and locatives, though the latter are somewhat restricted in what can be predicated to them.

Many nominal predicates appear to have a preference for Predicative Lowering, due to the historic augment deletion (see 3.1, 4.1); Van der Wal states that if an element can undergo Predicative Lowering, it must (Van der Wal, 2009); when a predicate is headed by the invariant copula it does not undergo PL, shown in (19).

19

*ole ti porosoorí	*S/he is a/the teacher.
ólé porosoorí	S/he is a/the teacher.

However, elements which do not historically have an augment seemingly cannot undergo Predicative Lowering and must instead use the invariant copula. This includes elements such as pronominal demonstratives (20), phrases headed by connectives (21), and personal pronouns (22).

20

porosóóri	t'	uúle
porosoori	ti	ole
1.teacher	COP	1.DEM.DIST

'The teacher is him/her.'

21

ehóp' éelá ti ya safáráwo
ehopa ela ti e-a safarawo
9.fish 9.DEM.PROX COP 9-CON yellow
'This fish is yellow.'

22

oómáliha ti mí
o-a-o-mal-ih-a ti mi
1-CON-15-finish-CAUS-FV COP 1SG.PRO
'The last is me.'

ti surfaces as *pi* when used with subjects from Classes 4 and 10. These two classes have identical agreement for connectives, verbal markers, and demonstratives, which is only to say that this pairing is not unexpected (Van der Wal, 2009 pp. 44, 81).

23

ekokhólá pi-tsoó-vél-íy-a
10.rubbish COP-10.CONN-15.sweep-PASS-FV
'The rubbish is swept.'

24

etthépó mpwíná ts-áyá pi ts-oórékama
10.elephant 4.trunk 10-POSS COP 10.CON-15-be.tall
'Elephants, their trunks are long.'

When nouns of Class 4 or 10 are coordinated as one subject with nouns of other classes, the copula may acceptably take either surface form (27).

25

nikúthá ni ekóókwínyó **pi**-ítthú / **ti**-ítthú tsi-n-kí-wéréya
5.knee and 10.elbow COP-thing/COP-thing 10-PRS-1SG.OM-hurt.REL
'The knee and the elbows are the things that hurt me.'

The copula also optionally occurs as *pi* over *ti* when introducing a reverse pseudocleft (26), (27).

26

ekamisa=áwé **pí**-m-pheel-áaka / **tí**-m-pheelá-aka
9.shirt=9.POSS.1 COP-PRES-want-POSS.1SG/ COP-PRES-want-POSS.1SG
'His shirt is what I want.'

27

eparáthú **pí**-n-ráp-íh=ááká ni sapáu
9.plate COP-PRS-wash-CAUS=POSS.1SG with 9.soap
'A plate is what I'm washing with soap.'

Constructions with a locative subject and adjectival predicate are the only locative constructions allowing the invariant copula (compare (28) to (16 & 17)).

28

a. wakisírwá ti w-oóréera
16.island COP 16.CON-15.be.good
'On the island it is beautiful.' lit. 'The island is of being good.'

b. m-phiró=ní ti m-oóréera
18-path=LOC COP 18.CON-15.be.good
'The path is clean/beautiful.'

It is interesting to note that an adjective which can be directly inflected, and thus does not require a copula, can optionally gain a connective and then carry a copula. The example sentence in (29) allows either construction for the clause "the fish is yellow." The inflected adjective is lowered, while the construction with the connective (and thus also the copula) is not.

29

a. enámá iya tsiriná ekoóré pinlí | ákwáátú t' oóríipá | n' ihópá **safarawó**

enama	iya	tsi-ri=na	ekoore	p-inli	a-kwaatu	ti	a-a-o-riipa
10.animals	10.DEM.PROX	10SM-be=with	10.colors	10-two	2-cats	COP	2-CON-15-be.dark

ni	ehopa	**safarawo**
and	9.fish	yellow.PL

'These animals have two colours: the cats are black, and the fish is yellow.'

b. enámá iya tsiriná ekoóré pinlí | ákwáátú t' oóríipá | n' ihópá **ti ya sáfáráwo**

enama	iya	tsi-ri=na	ekoore	p-inli	a-kwaatu	ti	a-a-o-riipa
10.animals	10.DEM.PROX	10SM-be=with	10.colors	10-two	2-cats	COP	2-CON-15-be.dark

ni	ehopa	**ti**	**e-a**	**safarawo**
and	9.fish	COP	9-CON	yellow

'These animals have two colours: the cats are black, and the fish is (of) yellow.'

Nominal predicates referring to the first (or second[5]) person can replace the invariant copula with the relevant subject marker (30), or subject marker-connective (31). This variation also occurs in neighboring Ekoti (Schadeberg, et al., 2000).

30

wé ntsina náwo | ki muúsa piíkhi

we	ntsina	n-awo	ki	muusa	piikhi
2SG.PRO	5.name	5-POSS.2SG	1SG.SM	Musa	Mpiikhi

'you, your name | I am Musa Mpiikhi'

31

mí ki'oókhúveya

mi	ki	o-a	o-khuveya
1SG.PRO	1SG.SM	1-CON	15-be.short

'I am short.'

[5] Van der Wal (2009 p. 120) discusses the second person subject marker replacing the copula: *wé o nkumí* 'you are healthy/alive' however there were no comparable examples available in the database used for this paper.

4.3 The Verbal Copula(s)

There are two verbal copula strategies in Makhuwa, a full copula *o-ri* 'to be' and the semi-copula *o-khala* 'to become, stay.' The latter, while not a prototypical copula, is paradigmatic for the pseudo or semi-copula class: a class which follows most copular tendencies in terms of use, with the exception of having a more elaborated meaning than standard copulas, like the English verb *become* (Arche, et al., 2019).

While the copula *-ri* does carry some verbal inflection, its inflection is far reduced from what one would expect from a usual Makhuwa-Enahara verb (see section 3.1), an occurrence common among verbal copulas in Bantu languages (Gibson, et al., 2019 p. 16). Standard verbs in Makhuwa-Enahara can have maximally six places at once, with up to five possible slots preceding the verb root and four following, including TAM, subject/object marking, junctivity, and more (Van der Wal, 2009). *Ori*, however, maximally inflects a subject marker and a situative or past marker, both appearing as *-a-*, as shown in (32).

32

latáráwu	a-a-ri	Omaari
1.thief	1SM-PST-be	Omar

'The thief was Omar.'

Alternatively, *okhala* is inflected to an extent slightly more typical to a Makhuwa verb, as shown in (33). The database used for this study shows inflection for perfective, persistive, and future tense/aspect, as well as obligatory subject marking.

33

kampiáú	o-nró-khal-a	Penfíika
1.champion	1SM-FUT-become-FV	1.Benfica

'The champion will be Benfica.'

Both verbs are used predominantly for the non-present, though have a few accepted instances of use in the present. Due to *okhala*'s more specific meaning, it is preferred for future constructions, and *ori* for past. Examples of accepted present tense use in a few lexical constructions are given below, including *ori ntoko* 'to be like/appear' (34).

34

mweéri	orí	ntokó	boóla
mu-eeri	o-ri	ntoko	boola
3-moon	3SM-be	like	1.ball

'The moon is like a ball.'

Either verbal copula can also be combined with the clitic *na* 'with' to give the meaning 'to have' (35 & 36).

35

sikhíni	ohikhálána	taát'	áawe	cf. taáta
sikhini	o-hi-khal-a=na	taata	awe	
poor	15-NEG-stay-FV=with	1.brother	1.POSS.1	

'Shame to not have a big brother.'

36

mí	kiriná	nlattu	nimotsa	ni	wé	cf. nláttú
mi	ki-ri=na	nlattu	ni-motsa	ni	we	
1SG.PRO	1SG.SM-be=with	3.problem	3-one	with	2SG.PRO	

'I have the same problem as you.'

The following subsections will discuss the verbal copulas in their more typical, non-present uses.

4.4 The Copula *o-ri*

The verbal copula is found in past constructions with all types of nominal and adjectival predicates. Predicates that would undergo predicative lowering in the present (common nouns (37), professions (38), and adjectives (39)) undergo predicative lowering following the past verbal copula.

37

(ehańtísi ela) nlávílavi (aarí) namarokoló				cf. namárókolo
ehantisi	ela	nlavilavi	o-a-ri	namarokolo
9.story	9.DEM.PROX	1.smartass	1-SM-PST-be	rabbit.PL

'(In this story) The trickster is/was Hare.'

38

Omáári aarí latarawú			cf. latáráwu
Omaari	o-a-ri	latarawu	
1.Omar	1-SM-PST-be	1.thief.PL	

'Omar was a/the thief.'

39

ekól' éele yaarí ekithí				cf. ekíthi
ekole	ele	e-a-ri	e-kithi	
9.coconut	9.DEM.DIST	9SM-PST-be	9-unripe.PL	

'This coconut was unripe.'

Predicates which do not undergo Predicative Lowering in the present but instead require the invariant copula (primarily pronouns (40), adverbs (41), adjectival constructions with a connective (42)) do not undergo Predicative Lowering when following a past tense verbal copula.

40

latáráwu waarí wé meekháwu			
latarawu	o-a-ri	we	meekh-awu
1.thief	2SG.SM-PST-be	2SG.PRO	alone-POSS.2SG

'The thief was you alone.'

41

eléló kirí meekháaka		
elelo	ki-ri	meekh-aaka
today	1SG.SM-be	alone-POSS.1SG

'Today I am alone.'

42

ehópá yaarí ya safáráwo
ehopa e-a-ri e-a safarawo
9.fish 9SM-PST-be 9-CON yellow
'The fish was yellow.'

When the verbal copula is used in present predication it is limited to locative constructions (43) which show location in a place, in which PL can not occur.

43

kwaátú o-rí watarátu
cat 1SM-be 16.roof
'The cat is on the roof.'

The copula also occurs in a lexicalized pseudocleft construction with the Class 16 demonstrative clitic *vo*, meaning 'there is/are.' Predicate Lowering does occur following these constructions: (44), (45).

44

orivó nramá cf. nráma
o-ri=vo nrama
3RM-be=16.DEM.MED 3.rice.PL
'What is there is rice.'

45

nirivó nikhotonkóro cf. nikhótóǹkóro
ni-ri=vo ni-khotonkoro
5RM-be=16.DEM.MED 5-khotonkoro.PL
'What's there is nikhotonkoro.'[6]

4.5 The Semi-Copula *o-khala*

The semi-copula *okhala* is used predominately for future constructions presumably due to its increased semantic meaning in comparison to *ori.* The semi-copula can mean either 'to stay' or 'to become' depending on context. Currently, the semi-copula has been found predominantly in nominal future constructions and present locative constructions. Predicative Lowering does not occur following the semi-copula. An example of future predication through *okhala* is given in (46).

46

kampiáú onrókhala Penfíika
kampiau o-nro-khal-a Penfiika
1.champion 1SM-FUT-stay-FV 1.Benfica
'The champion will be Benfica.'

There is also one example of the semi-copula in a perfective persistive nominal construction. The persistive perfective gives a sense of a continued progression, rather than something being completed before the statement is made, thus this example gives a reading more similar to "S/he is becoming crazy" than "has been/will become crazy," in which case the use of *okhala* over

[6] *nikhotonkoro* refers to a dish made of beans and cassava, mashed together until smooth.

Predicative Lowering or the invariant copula can be justified semantically (Van der Wal, 2009 p. 96).

47

ólé onúúkhálá nlólo — cf. nlólo
ole o-nuu-khal-a nlolo
1.DEM.DIST 1SM-PFV.PERS-stay-FV 1.crazy.person
'S/he is becoming crazy.'

Like the full verbal copula, locative constructions with the semi-copula indicate the subject's location in a place, no Predicative Lowering occurs in these attestations.

48

átrópá iíncééné a-n-khálá mparása
2.troops 2.many 2-PRS-stay 18.fortress
'Many troops stay in the fortress.'

4.6 Nonverbal Negation

All nonverbal negation in Makhuwa-Enahara is headed by the negative copula *kahí*. Makhuwa-Enahara has two verbal negators, pre-initial *kha-* and the marker *-hi-* which follows the subject marker (Van der Wal, 2009). The negative copula might be a combination of the two markers, though this would need further investigation to confirm. An alternative is that the structure is underlyingly *kha+ti*, and the plosive of the copula was weakened from the proto-Makhuwa stage (Van der Wal, p.c.).

When used in nonverbal predication, the negative copula precedes the predicated element, and no predicative lowering occurs.

49

ottúkútta kahí saána — cf. saána
o-ttukutta kahi saana
15-complain NEG.COP well
'To complain is not good.'

The negative copula can also occur with a pro-dropped subject.

50

kahí faásíli
kahi faasili
NEG.COP easy
'It's not easy.'

The negative copula can also be used to form questions with an expected affirmative answer.

51

masi kahí ńlávi?
masi kahi ńlávi
but NEG.COP taboo
'But isn't that witchcraft?'

Negative existentials are formed through a lexicalized combination of the negative copula *kahi* with the Class 16 demonstrative, appearing as *khaávó.*

52
khaávó ohirín'éháce
khaavo o-hi-ri=na ehace
NEG.BE.THERE 1REL-NEG-be=with 9.jealousy
'Everyone knows jealousy.' lit. 'There isn't who does not have jealousy.'

This section has discussed the copular strategies in Makhuwa-Enahara: Predicative Lowering, the invariant copula, and the verbal copula(s), as well as nonverbal negation. The syntactic environments in which each occurs have been described, and it has been noted that nominal and adjectival predicates appear to favor Predicative Lowering, while other elements are more likely to follow the invariant copula. Exceptions to these generalizations have been noted, with special regard to the appearance of a connective before an adjectival construction. The verbal copulas are used exhaustively and almost exclusively for non-present predication, though there a few lexicalized phrases which allow the verbal copulas in the present tense.

The next section will further discuss examples which show exceptions to the generalizations made above and present an alternative proposal to account for these exceptions.

5.0 Predication Strategy Selection

In this section I will begin by explaining the analytical problem at hand, namely that certain otherwise identical sentences can be found with different predication strategies, and that a small set of examples has been found going against the previously believed claim that when Predicative Lowering is possible as a predication strategy it is the only possible predication strategy. I hope to then provide a reasonable analysis for this issue, that copular construction type as well as part of speech affects the predication strategy at hand, and to then show the hierarchy of which factors bear more strongly on the choice.

What we find is that the predication strategy often shows deference not to part of speech, but to type of predication, a distinction which often can only be made explicit when surveying not only the utterance at hand but also the stimulus which produced it. However, choice of strategy also depends on phonology and tense as well. The Makhuwa split between predication types appears to be three-way: Predicational, Equational, Identificational pattern together, and Specificational and Locative patterning each in their own way; with the exception of non-present constructions, in which case all types use the verbal copula, but Specificational and some other constructions have a copular co-occurrence consistening of the verbal copula with the invariant copula and Predicative Lowering, respectively.

5.1 Proving the Problem

I have previously in this paper refered to Van der Wal's brief discussion of Predicative Lowering as a nonverbal predication strategy, but for the sake of clarity I will mention it once more here. In her dissertation, Van der Wal states: "For nouns which have the option of expressing predication by means of PL, this is the only strategy allowed" (2009 p. 121). Van der Wal also states that apart from nouns, adjectives and most interrogatives can undergo PL as well, as "these are words which had a pre-prefix in an earlier stage" (2009 p. 120). While I do largely agree with this claim, there are a few counterexamples which lead one to want a more precise explanation.

We can see the problem with this claim clearly in example (53). Here we see *kutsinyero*, 'cook,' in one instance lowered, and in the other following the copula. If we follow the assumption that all nouns which may be lowered must be lowered, this example should not be able to occur with an invariant copula.

53

a. namwívva kutsinyeró
   namwivva kutsinyero
   1.murderer 1.cook.PL
   'The murderer is a/the cook.'

b. namwívva ti kutsínyéro
   namwivva ti kustinyero
   1.murderer COP 1.cook
   'The murderer is the cook.'

We also have at least one example of a proper noun deemed grammatical with or without the invariant copula, and lowered, an alternation which cannot currently be accounted for under the assumption that lowering is obligatory and a copula is ungrammatical when lowering is possible (54).

54

présidenté asosiasáú (ti) Zakaria cf. Zakaría
presidente asosiasau ti Zakaria
1.president association COP 1.Zakaria
'The president of the association is Zakaria'

The examples presented show that there must be a further underlying division between what can be predicated with each strategy beyond parts of speech or directly having a historical augment. The analysis I propose is that the attestations at hand are reactions to different stimuli, and are thus different predication types. In order to prove as much, I will first discuss the differences between predication types and explain how they may differ in meaning, and then return to the examples at hand to prove their application to the proposed groupings.

5.2 Copular Construction Types in Makhuwa-Enahara

As previously mentioned, debate continues about the amount of different underlying predication types possible within a language (see 3.2 for more discussion on the current theoretical state of the field), Makhuwa-Enahara shows a three way surface level divide between the examples collected: Predicational, Equational, and Identificational, versus Specificational, versus Locative. Each of these predication types has previously been discussed, but for ease of reading I will provide a brief recap of each here, with examples from English and Makhuwa-Enahara.

A predicational construction has a referential subject and an attributive predicate, i.e., the post copular element is a property of the subject, for example: "Abby is tall."

55
Predicational
eparáthú yankhaáni
eparathu e-ankhaani
9.plate 9-small.PL
'The plate is small.'

Specificational constructions are the reverse, a subject which defines an attribute and a predicate that identifies the subject: "The tall woman is Abby."

56
Specificational
nlávílavi ti namárókolo
1.smartass COP 1.rabbit
'The smart one is Hare.'

Equational constructions name two entities that are underlyingly the same: "Abby is my sister."

57
Equational
ekisírwá elá, onhipití
e-kisirwa ela o-nhipiti
9-island 9.DEM.PROX 17-IdM.PL
'This island is Ilha de Moçambique.'

Identificational constructions have a demonstrative or pronoun as the subject and an identity statement as the predicate: "That is Abby." Makhuwa-Enahara has two types of constructions that could be justifiably referred to as Identificational predication, one with a demonstrative subject (58a) and one with a pro-dropped subject (58b), however we only have one example of the latter such construction.

58
Identificational
a. ólé patareró
1.DEM.DIST 1.bricklayer.PL
'That is the bricklayer.'

b. áyo porosóóri
yes 1.teacher.PL
'Yes, he is a teacher.'

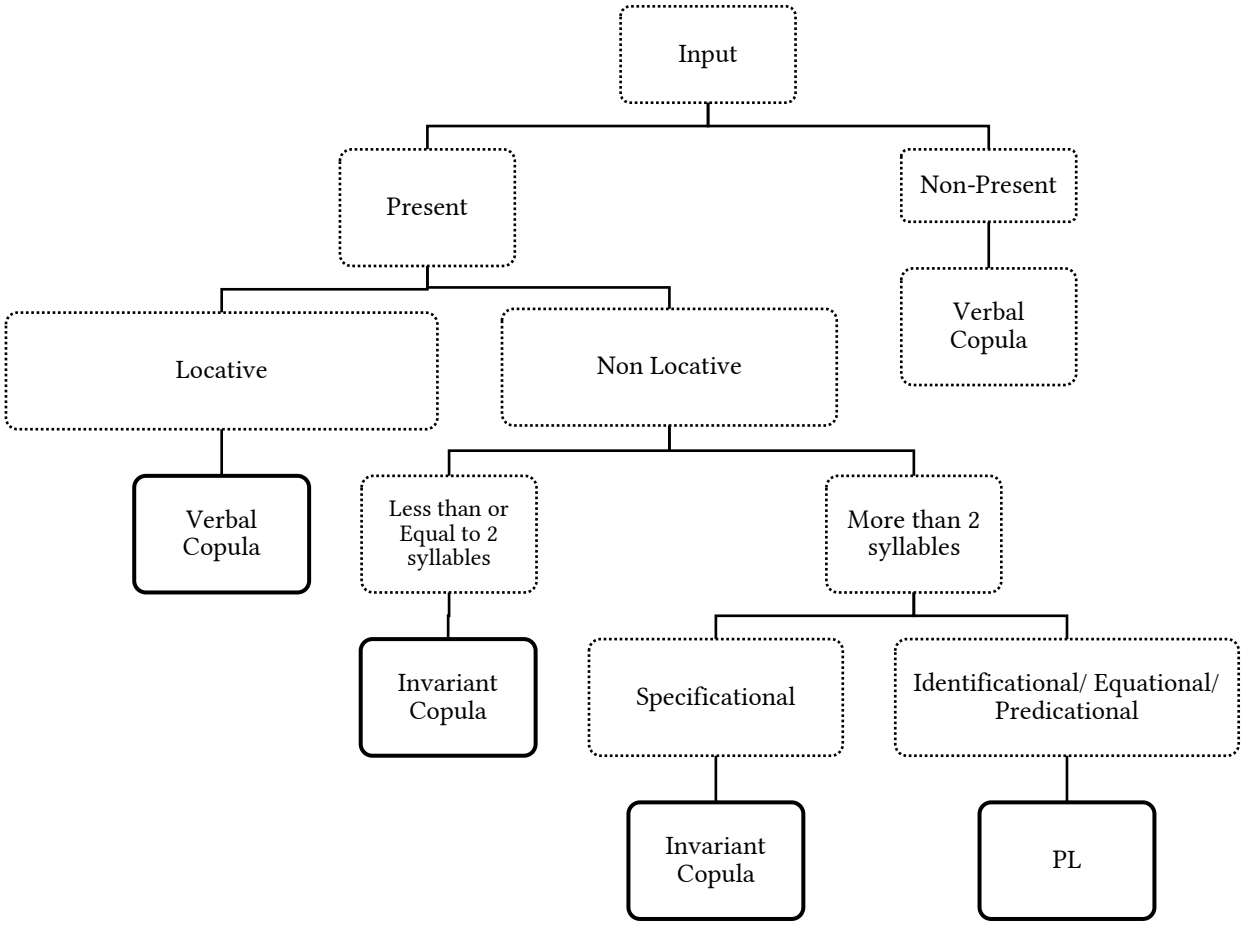
Locative/temporal constructions specify the subject's place in time or space: "Abby is in the tree."

59
Locative/Temporal
o-rí mpáani
1SM-be inside
'S/He is inside.'

There is a visible divide between the predication types: Equational, Identificational, and Predicational constructions use Predicative Lowering, while Specificational triggers the invariant copula, and Locative/Temporal constructions use the verbal copula. However, there are caveats to this: as we have seen, adjectival predicates (which are inherently Predicational) differ in copular strategy according to whether or not they are headed by a connective (shown in 4.1 & 4.2). On the opposite side of things, names *Ali* and *Anitu* (example 75) use different strategies even within the same sentence, despite being inherently referential. And all non-present examples use the verbal copula, though some can then be lowered following the copula and some cannot. There are clearly multiple factors at play when determining the correct predication strategy, and the order of determination for those factors is important.

My proposed ordering of the factors influencing Predication Strategy selection is as given in (60). Boxes showing the final output of a stream have a solid border, all intermediate steps have a dashed border.

60. Steps to Determine Predication Strategy



Notably, the Verbal Copula under Non-Present constructions is not marked as final in the same manner as the other output boxes.

In order to justify the ordering given here, I will now walk through the steps as shown, providing examples throughout.

5.3 Selection for Tense

The most consistent factor among copular constructions in Makhuwa is that all non-present clauses include one of the two verbal copulas, no matter the substance of the construction. Consider the examples in (61). (61a) would, in the present, surface as a predicatively lowered Predicational phrase but in the past uses the verbal copula, while (61b) would be headed by the invariant copula, due to its connective, but in the past tense only uses the verbal copula.

61

a. ekól' éele yaarí ekithí

ekole	ele	e-a-ri	e-kithi
9.coconut	9.DEM.DIST	9SM-PST-be	9-unripe.PL

'This coconut was unripe.'

b. ehópá yaarí ya safáráwo

ehopa	e-a-ri	e-a	safarawo
9.fish	9SM-PST-be	9-CON	yellow

'The fish was yellow.'

This wholesale use of the verbal copula for non-present tenses is common and even expected among Bantu languages, including those with many different copula types, as discussed by Schneider-Zioga (2019). However, there are some non-present examples with the verbal copula that also feature the invariant copula (62) or Predicative Lowering (63).

62

Context: Hare and Gazella are being compared to decide who is smarter, but Hare is no longer present/alive at this point of the story.[7]

nlávílavi aarí tí namárókolo

nlavilavi	o-a-ri	ti	namarokolo
1.smartass	1SM-PST-be	COP	1.rabbit

'The smart(est) one was Hare.'

63

wé waarí latarawú masi vánó woohíya cf. latáráwu

we	u-a-ri	latarawu	masi	vano	u-o-hiy-a
1.2SG.PRO	2SG.SM-PST-be	1.thief.PL	but	now	2SG.SM-PFV.DJ-leave-FV

'You were a thief but now you've stopped.'

This verbal and nonverbal copular co-occurrence can likely be explained by the fact that Predicative Lowering and the invariant copula do not have any way to show tense on their own. Copulas are semantically light or even empty cross-linguistically and Makhuwa is no exception, thus the verbal copula can be used to communicate the tense of the clause without affecting the overall meaning.

A complication to this theory comes when we consider the predication of verbal adjectives. As discussed in section (4.2), one of the main ways to create an adjectival predicate is through the use of a connective preceding a verb, illustrated in (64). It is important to note that Class 15 is a noun class reserved only for the infinitive forms of verbs; up to this point infinitives

[7] This context description is based on a speaker comment: "When comparing between Hare and Gazella who is smarter… but he doesn't exist anymore (in the story)."

in this type of construction have been glossed as ‘15,’ though in this section they are glossed as infinitives in order to better facilitate the following discussion.

64

ceéló ti yoóríirya
ceelo ti e-a o-riirya
9.ice COP 9-CON INF-be.cold
‘Ice is cold.’ lit. ‘Ice is of being cold.’

The example in (64) is a present nonverbal predication construction as has been discussed throughout this paper. However, as *oriirya* is a verb, it could be directly conjugated for the present tense as in (65).

65

ceélo enááríirya
ceelo e-naa-riiry-a
9.ice 9SM-PRES.DJ-be.cold-FV
‘Ice is cold.’

The question then becomes the difference between nonverbal predication and direct inflection of the verb. The examples in (64 & 65) were elicited through translation, and thus do not give much insight into the semantic differences of the two constructions. Consider the examples in (66 & 67), elicited through reaction, with their respective contexts.

66

Context: This is a permanent quality; it is naturally so.

ekattáká ya Alí ti yoóríipa
ekattaka e-a Ali ti e-a-o-riipa
9.skin 9-CON 1.Ali COP 9-CON-INF-be.dark
‘Ali’s skin is black.’ lit. ‘Ali’s skin is of being black.’

67

Context: Only when his skin was another color, it is not a permanent quality.

ekattáká ya Alí enááríipa
ekattaka e-a Ali e-naa-riipa
9.skin 9-CON 1.Ali 9SM-PRES.DJ-be.dark
‘Ali’s skin is black.’

The examples given in (66 & 67) mirror the constructions of (64 & 65) exactly, the first of each set being copular and the latter being conjugated in the present disjoint tense. In (66 & 67) we can see that the copular example is viewed as a permanent, inherent quality, while the present disjoint form is true in this moment, but not always. Further consider (68), deemed infelicitous by the speaker because “there are walls that are cold!”[8]

[8] This is my own translation; the original comment was given in Portuguese: "mas tem paredes que está *f*o frio!"

68

ntsúwá noótthékuwa | eparíti ti tsoóvíha
ntsuwa n-a-o-tthekuwa epariti ti tsi-a o-viha
5.sun 5-CON-INF-?[9] 10.walls COP 10-CON INF-be.hot
'In the afternoon, the walls are hot.' lit. 'In the afternoon, the walls are of being hot.'

The sentence was deemed felicitous only if one is saying that the walls are always hot. In order to say that the walls are hot only in the afternoon, 'be hot' must be conjugated in the present (69).

69

ntsúwá noótthékuwa | eparíti tsináávíha
ntsuwa n-a-o-tthekuwa epariti tsi-naa-viha
5.sun 5-CON-INF-? 10.walls 10-PRES.DJ-be.hot
'In the afternoon, the walls are hot.'

The examples shown imply that "present" predication as we have seen up to this point is not canonically present, but rather has some further underlying meaning. Furthermore, the speaker insights given in regard to (68) show that "present" predication tells something that is universally true. This is supported by the example in (70a) compared to that of (70b), in which the use of direct inflection of the verb is made grammatical by delimiting the scope of the clause from a generic statement to a description of one specific fire.

70

a. moóro ti woóvíha
mooro ti w-a-o-viha
3.fire COP 3-CON-INF-be.hot
'Fire is hot.'

b. moóró onáávíha
mooro o-naa-vih-a
3.fire 3SM-PRES.DJ-be.hot
'The fire is hot.'

Clearly the present tense and present predication are not the same. My analysis of the acceptability differences in these examples is that Makhuwa nonverbal predication as it has been presented here is not truly "present" in the sense of it being current, but rather expresses a tenseless state. Non-present predication then expresses a characteristic that was or will be an inherent part of the subject, but for some reason is not currently. Take (62) repeated again here.

71

Context: Hare and Gazella are being compared to decide who is smarter, but Hare is no longer present/alive at this point of the story.

nlávílavi aarí tí namárókolo
nlavilavi o-a-ri ti namarokolo
1.smartass 1SM-PST-be COP 1.rabbit
'The smart(est) one was Hare.'

[9] The exact meaning of the verb stem *tthekuwa* is not known, however *ntsuwa naotthekuwa* is a lexicalized combination meaning 'afternoon.'

Hare, a traditional folk character, at this point in the story is no longer a character and thus has no currently applicable attributes. However, an aspect of his personality throughout this and many other stories is that he is a clever trickster, and thus being “smart” can be seen as a constant for him.

This analysis also helps in explaining Locative predication and its different structure from the other predication types discussed (see section 4.3). Locative predication as discussed previously obligatorily uses the verbal copula, as shown in (72), and does not communicate any property or state inherent to the subject, compared to example (73) which is not canonical locative predication, but instead predicates a locative noun, and does so through use of Predicative Lowering, by attributing a state of existence that is true and presumably will be so *ad infinitum*.

72

orí úwáani
o-ri o-waani
1SM-be 17-home
‘He’s at home.’

73

enúp' éel' éelé owany' aká
e-nupa ele ele o-waani aka
9-house 9.DEM.DIST 9.DEM.DIST 17-home.PL POSS.1SG
'That house over there is my home.'

This juxtaposition of nonverbal predication of an adjectival verb versus conjugation of the verb is comparable to the differences in predication of Stage Level versus Individual Level predicates, as in Spanish with *ser* and *estar* (Arche, et al., 2019) or in Kihavu and Kinande (Gluckman, et al., 2022; Schneider-Zioga, et al., 2015), though these languages have a one to one copular variation, versus the copula to verb variation shown for Makhuwa.

There are further aspects of this analysis to discuss, namely that some predicates can appear in the non-present without either Predicative Lowering or the invariant copula (see 61b). These examples are few and most are utterances which use the invariant copula due to phonological constraints (these constraints will be discussed further in section 5.5); it is possible that the presence of the verbal copula in non-present predication erases all chance of ambiguity and thus *ti* is not necessarily inserted. More examples would be needed to support any strong analysis.

The discussion here shows that there must actually be two separate paths for determining surface level constructions: one for present (tenseless) predication and one for non-present predication, the latter of which would check for Predication Type as a final step. While this differentiation is interesting, I will continue on with discussion of the present tense predicates and return to the discussion of tense in section 6.0.

5.4 Selection for Locative Predication

The second factor in determining predication strategy also relates to the verbal copula, the selection for Locative predication. This means any construction defining a subject’s place in time or space will use the verbal copula.

74

a. áNátsáriyo yaari váyi?
a-Natsariyo a-a-ri vayi
2-Nazario 2SM-PST-be where
'Where was Nazario?'

b. nlávílavi or' útá, ˜uwo
nlavinlavi o-ri o-ta uwo
1.smartass 1SM-be 17-outside 17.DEM.MED
'The smartass is outside.'

5.5 Selection for Phonology

The next factor to consider is the phonology. I will begin with the examples shown in (75). The example below shows the names Alí and Anítu as predicates of the same sentence. Alí is judged as grammatical only following the copula, whereas Anítu is grammatical only when having been lowered.

75

a. porosóóri Zanairá | patéró Natsaariyó | alúfíáti ***Alí / t' Alí**
porosoori Zanaira patero Natsaariyo alufiati **Ali** **ti** **Ali**
1.teacher 1.Zanaira.PL 1.baker Nazario.PL 1.tailor **1.Ali.PL** **COP** **1.Ali**
'The teacher is Zanaira, the baker is Nazario, the tailor is Ali.'

b. porosóóri Zanairá | patéró Natsaariyó | alúfíáti **Aniitú /*t' Aníitu**
porosoori Zanaira patero Natsaariyo alufiati **Anitu** **ti** **Anitu**
1.teacher 1.Zanaira.PL 1.baker Nazario.PL 1.tailor **1.Aniitu.PL** **COP** **1.Aniitu**
'The teacher is Zanaira, the baker is Nazario, the tailor is Aniitu.'

As the same sentence is used for both names, we can determine that there is no semantic or syntactic difference between the two predicates and must look for answers elsewhere. As one is lowered and not the other, we clearly cannot say that solution is simply an inability for names to be predicated one way or the other. We could refer back to the source of Predicative Lowering, assumed to be historic deletion of the pre-prefix, and say perhaps Ali is a name borrowed after disappearance of the augment, and thus there is no residual augmental tone to delete. However, even without knowing the exact timing of the augment erasure we can look at other borrowings to see that this is incorrect. Take (5) for example, discussed previously in 3.1 but repeated here for convenience in (76):

76

naáta nithummé ekoopo tsikháani cf. ekópó
naata ni-thum-ale ekoopo tsi-khaani
no 1P.SM-buy-PFV.CJ 10.cups 10-small
'No, we bought small cups (not big cups).'

Here, *ekoopo* is successfully lowered, however *ekoopo* is a loan from Portuguese *copo(s)*, whereas Ali is an Arabic loan, and would have been established in the area well before the Portuguese made their appearance (Kröger, 2005). The most likely remaining explanation for this differentiation is the phonological structure of the two names, namely that if Alí were to undergo PL, the process would result in a tone pattern identical to that of the citation form, and thereby be perceived as ungrammatical, or at the very least ambiguous, by the speaker.

77

L H	L H	L H H
| ┼	| ┼	| ┼/
Alí	Ali	Alí

In order to avoid this infelicitous reading, the predication is made explicit through the unambiguous occurrence of the invariant copula. This proposal is strengthened by the fact that since only the initial word of any given predicate can undergo lowering, this same tonal ambiguity would be shared by other short words that occur in the first position of the predicate, i.e., connectives, which accounts for the distinction between the two previously discussed adjectival construction types.

5.6 Selection for Predication Type: Specificational, Predicational, Identificational, Equational

The final determing factor in predication strategy choice is the type of predication at hand. This step assigns either the invariant copula or Predicative Lowering based on the respective referentiality of each side of the copula. If all other qualifications have been met, i.e. present tense, non-locative predication, and of acceptable phonological length; then Predicational, Equational, and Identificational constructions will pattern together with Predicative Lowering, and Specificational constructions will use the invariant copula.

Take the examples in (78), repeated here for convenience, this time with the contexts that prompted each attestation and their predication type. *kutsinyero* is shown being acceptably predicated through PL, but also through the use of the invariant copula. This is due to the differences between the stimuli that produced the examples.

78

Context: Between the waiter, the manager etc, we identify the murderer. SPEC

a. namwívva ti kutsínyéro
   namwivva ti kustinyero
   1.murderer COP 1.cook
   'The murderer is the cook'

Context: 1: Who is the murderer? 2: What does the murderer do for a living? EQ/PRED

b. namwívva kutsinyeró
   namwivva kutsinyero
   1.murderer 1.cook.PL
   'The murderer is a/the cook'

Context: Who do you think is the murderer? ID

c. mí kinimúúpuweléla wiírá kutsinyeró / t' Aalí
   mi ki-n-n-upuwel-a wiira kutsinyero ti Ali
   1SG.PRO 1SG.SM-PRS.CJ-1OM-think-FV COMP cook.PL COP 1.Ali
   'I think that it's the cook/Ali.'

In (78a), the construction featuring the invariant copula, the sentence was produced when identifying which member of a specific set of people was a murderer. "The cook" in this case is already a known entity, our referent within the construction, and "murderer" is an attribute being applied to him. By putting the referential element in the post copular position, we have a

Specificational construction, and thus the invariant copula is necessarily selected over Predicative Lowering.

(78b), the lowered example, was given as a response to either of two questions: "Who is the murderer?" or "What does the murderer do for a living?" The type of predication shown depends on which question we take as the stimulus. The former question "Who is the murderer?" necessitates an Equational clause so as to ratify the two identities of 'murderer' and 'cook,' a slightly more sinister counterpart to the oft cited English example of an equational construction: "Superman is Clark Kent" (Arche, et al., 2019; Gluckman, et al., 2022). In response to the latter question prompting (78b), 'the murderer' is the referential element, the known entity, and 'cook' is a profession being attributed to said referent, making the construction Predicational. (The possible alternation in definiteness is due to the fact that the former question would require one specific cook to be chosen, whereas the latter would not.)

In (78c), despite the sentence being Identificational (a pro-dropped pronoun followed by a referential post-copular phrase), Alí still appears with the copula rather than PL, which confirms that phonological constraints override syntactic constraints.

Consider, as well, the following example set:

79

a. Context: There is only one teacher in the community. The nephew or niece of the teacher always brings the uncle's books home. Someone sees this and wonders "But why is she always carrying these books?" Another person, who knows the uncle, says this:

áháalw' áawe t' áporosóori			
a-haalu	awe	ti	a-porosoori
2-uncle	2.POSS.1	COP	2-teacher
'Her uncle is the teacher.'			

b. eniíríya áháalw' áawe aporosóóri?

e-n-iir-iy-a	a-haalu	awe	a-porosoori
9-PRS-say-PASS-FV	2-uncle	2.POSS.1	2-teacher.PL

'Is it true that her uncle is a teacher?' lit. 'It is said that her uncle is a teacher.'[10]

The embedded clause within (79b) 'her uncle is a teacher' is a rather straightforward predicational construction. The referential subject is followed by an attributional post-copular phrase.

The more interesting point of discussion is (79a). (b) is evidence that *aporosoori* can phonologically be lowered, however in (a) it is not.[11] Presumably, in the situation leading to this utterance, it would be known or at the very least assumed that the books had some connection to the school or the teacher, leading *aporosoori* to be less discourse-new and thus more referential than 'her uncle.' That would make the construction Specificational, and thus require the use of the invariant copula over Predicative Lowering.

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[10] The Class 2 marker is here used as a sign of respect in front of a Class 1 noun. The Class 2 marker is underlyingly *á-*. The additional H introduced by this prefix changes the PL form of *porosóóri* from what we have seen before, as the introduced H of the preprefix becomes the initally deleted H, rather than that of the penultimate syllable, meaning on first glance the word may appear not to be lowered when it is.

[11] It has been suggested that the lack of HTD onto the second mora of *áporosóori* here may seem to suggest that the H comes not from the honorific prefix but instead from liaison of the copula. However, we see similar liaison in *porosóóri t'uúle* 'The teacher is him/her' and *mí kinimúúpuweléla wiírá t'Aalí* 'I think that it is Ali' without introduction of a High.

5.7 Alternative: Phonology as Final Selection Step

It could be argued that a better progression would allow for selection of all Predication types immediately following Tense, and a back checking for Phonology as the final step, rather than selecting first only Locative/Temporal, then determining between Specificational, Predicational, Equational, and Identificational predication after considering the phonology. An alternative way to view this same progression would be to set phonology before any predication type consideration.

This ordering would largely produce the same result, the distinction between PL and *ti* would be mostly unaffected, however the major counterpoint for this example stems from the clash that would arise between the verbal copula and *ti.* It is crucial that phonological constraints not be applied to constructions necessitating the verbal copula, as they would create ungrammatical constructions. If Locative/Temporal constructions were assigned the verbal copula then back checked for phonology, there would be issue with examples such as (80).

80

ephíró yáńkaáni erí ṹwe
e-phiro e-ankaani e-ri uwe
9-path 9-small.PL 9SM-be 17.DEM.DIST
'The small path is there'

The Class 17 demonstrative that is predicated in (80) would fail the minimality requirement of the phonology selection and be assigned to predication with *ti*, which would then create an ungrammatical construction (81).

81

*ephíró yáńkaáni ti úwe
e-phiro e-ankaani ti uwe
9-path 9-small.PL COP 17.DEM.DIST
'The small path is there.'

As we have no Locative or non-present predicates with *ti*, we must assume that the phonological requirement can be applied only to the distinction between *ti* and PL and not to those constructions in which we expect to find *ori*, and the most elegant way to ensure such constraints is to remove all verbal copula constructions before introducing the minimality requirement.

In light of the evidence shown here, (82) gives the surface representation for the head of each type of copular clause in Makhuwa-Enahara.

82

	English	Makhuwa
Predication	be	PL
Equation	be	PL
Identification	be	PL
Specification	be	*ti*
Short Predicates	be	*ti*
Location	be	*-ri*

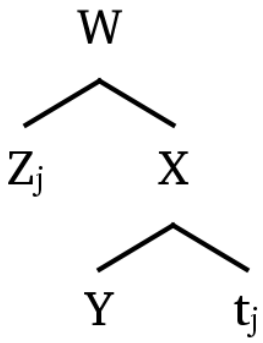
In the next section I will show the underlying structures of each type.

6.0 Analysis of Syntactic Structures

In this section I will attempt to illustrate the underlying structure of each predication type with syntactic trees, and highlight the key differences between them. I will facilitate this analysis by beginning with a brief discussion of relevant background information and key terms.

In a Minimalist Syntax model, only two nodes are combined at once, in a process called Merge (Chomsky, 2001). The elements that make up these nodes can either be new to the tree, an External Merge, or come from a preexisting part of the tree at hand, an Internal Merge, either of which creates a new, higher element. An Internal Merge involves an element being copied from its original position in the tree, and moving to a new position in the tree, and is thus also at times referred to as Move(ment). This leaves in its place a copy that is also syntactically present, but only the highest version is realized at the phonological level. The base generated location for any copied forms is shown in the following trees as *t*. (83) shows an External Merge between Y and Z to create X, at which point Z then undergoes an Internal Merge with X to create W.

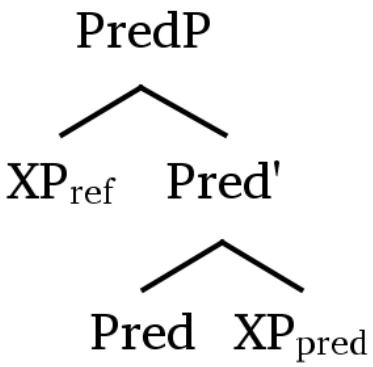
The only relationship posited between parts of a tree is Agree. When Agree is initiated, a feature, called the Probe, searches its c-command domain (the element next to it and any element below that) for a node that will satisfy some requirement it has, the Goal. These elements then enter into an Agree relationship, meaning they share a feature visible on one or both elements, and the Goal is moved to the head of the Probe.



In this section I will present the syntactic trees for each predication type previously discussed. Canonical sentences of each type have been chosen, meaning tenseless constructions in which the phonological constraint is met. I will start with constructions with Predicative Lowering: Predicational, Equational, and Identificational clauses; followed by Specificational constructions, showing that the PL/copula variation is simply due to different spell outs of the Pred head. I will then briefly illustrate my analysis of short Predicates that surface with *ti*, as well as negation. Next I will move into a discussion of non-present predication, illustrating the argument that "present" predication is actually syntactically tenseless and the verbal copula is only present as a spell out of TAM, and thus the PL/copula variation is able to be maintained without interference in the PredP domain. I will end with a discussion of locative predicates, building on the previous discussion of the verbal copula to argue that they are not truly nonverbal predication but rather *ori* is chosen as a semantically light enough verb to facilitate subject and tense display in the surface representation.

I follow the PredP hypothesis, in the vein of (Bowers, 1993; Mikkelsen, 2005; den Dikken, 2006; Stowell, 1981).[12] PredP is the domain of the functional Pred head which allows nonverbal predication to differ in structure from canonical verbal predication. PredP is located under the verb phrase, though it is still debated as to whether verbal predication necessarily includes a PredP, or whether it can stand alone as a pseudo-vP (Baker, 2003). PredP takes two arguments, of which the predicative is found in the complement position and the referential is found in specifier position of the PredP, illustrated in (84), as discussed at length by Mikkelsen (2005). These arguments can be of many phrase types, though in Makhuwa the referential element tends to be a DP, while the complement is most frequently an NP or AP. Makhuwa-Enahara follows the Extended Projection Principle (EPP) which dictates that all sentences must have a subject, and so one of these elements is always raised to subject position.

84



Van der Wal (2009) shows that each morpheme of the verb in Makhuwa lies at a separate level of the tree. While I agree with this claim, I have chosen to collapse the verbal domains in this section in order to give preference to the more relevant aspects in terms of this discussion: the nonverbal elements. In this regard, VP in the following sections should be taken as shorthand for the combination of morphemes which makes up the verb.

6.1 Predication, Equation, and Identification

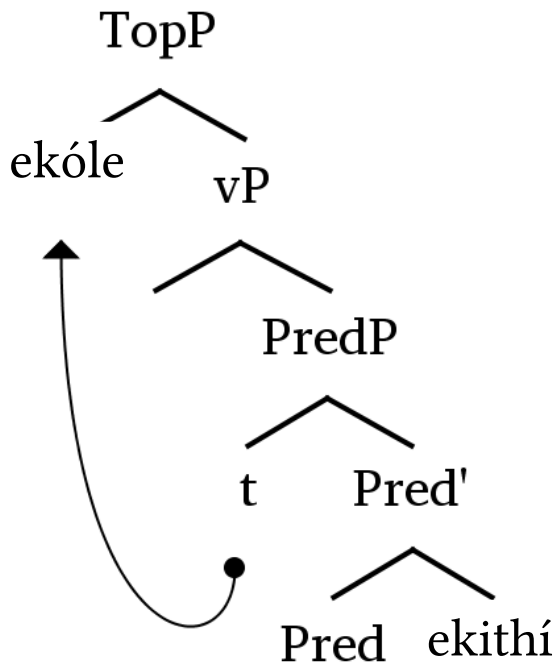
Predicational, Equational, and Identificational constructions all have the same surface representation, and will be shown together in this section. For these examples, canonical sentences have been chosen, meaning those which are in the present tense and meet the phonological requirements. The structures are all very similar, with slight differences in what types of elements are generated in the PredP domain, all movement for the purposes of EPP comes from the leftmost element of the Pred-bar domain. It should be noted that the previous discussion of predication as inherently tenseless leads to two possible nonverbal tree structures: one with TP but with some sort of null head, and one without TP. I have chosen to represent the following tenseless trees without a TP domain, simply because there seems to be no great argument for its inclusion. Similarly, the inclusion of FocP could be argued for, in an attempt to account for PL's other function as a sign of the presence of a conjoint verb (and the closeness between the verb and following element). However, there is still ambiguity as to whether PL in the sense of conjoint constructions is truly a structural element or rather just a phonological

[12] Stowell of course put forward not a proposal for PredP but for SC, a Small Clause, from which PredP (or PrP as Bowers refers to it) was then developed. However the exact nature of the discourse leading to the development of PredP is not entirely relevant for this paper.

remnant. I remain agnostic towards this debate and have chosen not to include FocP for simplicity's sake.

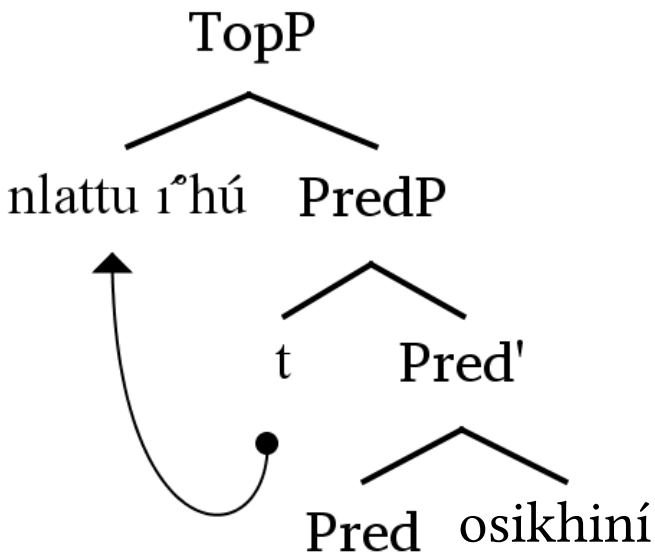
The tree in (*85*) shows a Predicational construction. In this example, the predicate 'unripe' is base generated in complement position of the PredP, and the canonical subject 'coconut' is generated in specifier position. Also present is the Pred head, though no specific spell out is given in the diagram. This is because the exact spell out of the Pred head depends on the complement left in the PredP after EPP. In this analysis, the referential DP, in this instance '*ekóle*,' is moved to subject position in the TopP. The remaining PredP element (apart from the as of yet amorphous Pred head), *ekithi*, is over two syllables in length and in the canonical predicational position, the complement, and so Predicative Lowering is chosen as the spell-out for the Pred head.

85 ekóle ekithí
9.coconut 9-unripe.PL
'The coconut is unripe.'



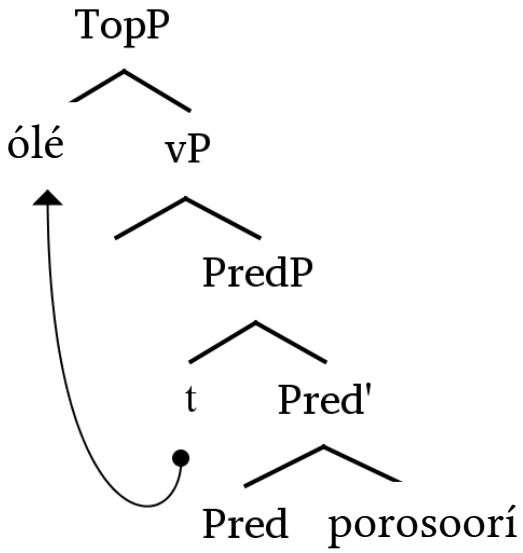
Similarly, the Equational structure in (*86*) shows two base generated elements, this time both DPs, the first of which is moved to subject position. The Pred head and TopP both appear as before: undefined. In this instance, both arguments of PredP are referential, though one is still generated in the predicational complement position and the other in specifier position. EPP selects whichever DP is more available, a status that is given to the closest DP, *nlattu íhu*, which is then raised to SpecTopP. Either element in an equational structure could be generated in the specifier position, and likely the choice is made by the speaker to put the more topic DP in specifier position so that it will then raise to SpecTop, and the remaining DP is left in focus position. This again leaves only the complement in the Pred-bar which, while the DP is not inherently predicational, is still in the canonical predicational position; this again causes the Pred head to spell out as Predicative Lowering, its requirements being satisfied with the structural position and phonological length of the given DP.

86 nlattu íʿhu osikhiní
3.problem POSS.1P poverty.PL
'Our problem is poverty.'



The Identificational structure in (*87*) is similar, with both XPs generated in the PredP. In this instance, the complement, *porosoori*, is a canonical NP while the SpecPred is the demonstrative *ólé*, which is moved to TopP. Again, both elements are referential and thus either could theoretically take specifier position. However, this remains rather ambiguous as *ólé* does not meet the phonological requirement for Predicative Lowering and so a reversal of this subject-predicate combination would always surface with the invariant copula.

87 ólé porosoorí
1.DEM.PROX 1.teacher.PL
'S/he is the teacher.'



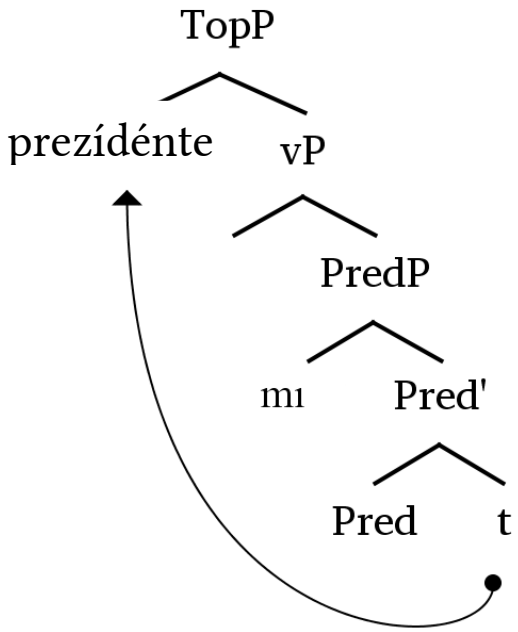
6.2 Specification

If you will recall, Specificational clauses in Makhuwa have a surface structure unlike that shown for the other copular types, as they are the only copular clause that consistently uses the invariant copula. There are two main schools of thought in regard to the underlying structure of Specificational clauses: the inverse analysis (Mikkelsen, 2005; Moro, 1997; den Dikken, 2006) and the equative analysis (Heycock and Kroch, 1999). The equative analysis of Specificational clauses posits that both DPs generated in the PredP are equally referential, both being <e>, though the element in specifier position has a subject feature. The inverse analysis argues that the SpecPred is referential <e> and the complement is predicative <e, t>, identical to the structure of a Predicational construction. Both analyses raise the complement to subject position.

Makhuwa's surface representation argues for an inverse analysis, in which the predicative element is raised from the PredP complement position to the subject position of the clause, leaving the referential element in the specifier position of the Pred domain, with the Pred head.

The example in (*88*) shows the Specificational construction "The president is me." In this example, *mí* is generated in the specifier position, while 'the president' is generated in the complement position. The set-up is identical to that of a predicational clause, however in this context the complement is raised instead of the specifier. Specificational clauses arise when the speaker wants to topicalize the predicational DP rather than the referential DP and does this by putting the predicative DP into the leftmost position, the canonical topic position in Makhuwa (Van der Wal, 2009).[13] The Pred head then spells out as *ti*.

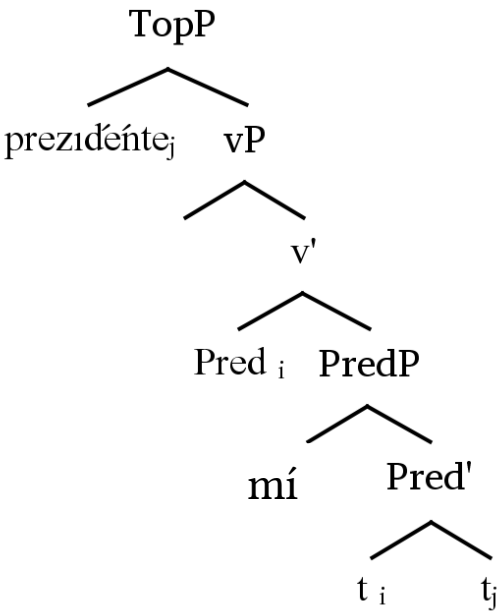
88 prezídénte ti mí
1.president COP 1.PRO
'The president is me.'



I argue that from this point, the surface order of the elements is obtained by some constriction on the Pred head to appear before any other element in the PredP domain, in this instance *mí*, a need for the Pred head to in fact *head* something. The play out of this argument is that after the stage shown in (*88*), there is then a second raising, this time of the Pred head to a position above PredP (and thus *mí* as well). I posit that the second raising that takes place is from the Pred head to v, shown in (89). The specifier position in v-bar is the canonical generation point for verbal adjuncts. This allows the Pred head to occur before the predicate of the sentence, *mí*, and accounts for the difference in spell out. This same movement could occur in all other copular clauses, string vacuously, though Specificational clauses would still be the only clauses with an element in SpecPred, which would maintain the differentiation in spell out.

[13] This thinking follows of course from Mikkelsen's claim: "The reason why the subject of a specificational clause is always topic is that this is a precondition for getting a specificational clause at all" (Mikkelsen, 2005 p. 163).

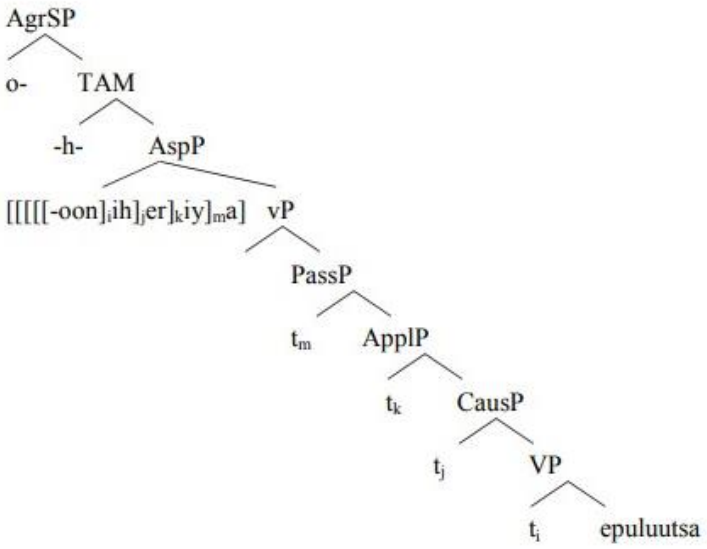
89



Loccioni (2019) shows that specificational clauses in Maragoli (JE41; Maho 2009), and their unique copula, are a spell out not of the Pred head but rather of a dislocation of the Pred complement to a location in the left periphery. Loccioni's analysis was entertained for Makhuwa, but this would cause a further complication in the fact that in non-present specificationals *ti* occurs after the verbal copula. On first glance, a similar issue may come to rise with this proposal, however, Van der Wal (2009) shows that the verb is base generated in VP but is raised to a position ranging from AgrSP to AspP, above the vP. (90) shows Van der Wal's analysis of verb raising in Makhuwa, complete with an empty spec-vP (2009 pp. 169 ex:52-53).

90 *nlópwáná o-h-oón-íh-er-íyá epuluútsá*

'the man was shown the blouse'



While the Specificational proposal presented here holds for the data collected thus far, it is still rather tenuous. One could argue that in fact no Pred head is present in Specificational structures at all, but rather that in this instance both DPs are generated in a small clause and *ti* is instead the spell out of possibly FocP or another domain. The complication then would arise in describing why the invariant copula can be used as a stand in for PL when phonological constraints are not met.

6.3 Short Predicates & Nonverbal Negation

In order to further demonstrate the differences possible within the same predicates, I will return to the example sentences of (78). The third example of the set is perhaps the most interesting, as the introduction of the phonological constraint forces the analysis to account for the incompatibility of PL with what would otherwise be a Predicatively Lowered Identificational clause.[14]

91

Context: Who do you think is the murderer? ID

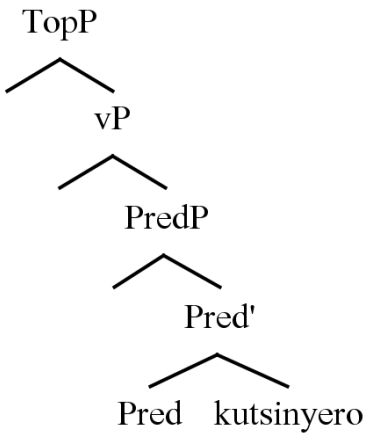
mí kinimúúpuweléla wiírá kutsinyeró / tAalí

mi	ki-n-n-upuwel-a	wiira	kutsinyero	ti	Ali
1SG.PRO	1SG.SM-PRS.CJ-1OM-think-FV	COMP	cook.PL	COP	1.Ali

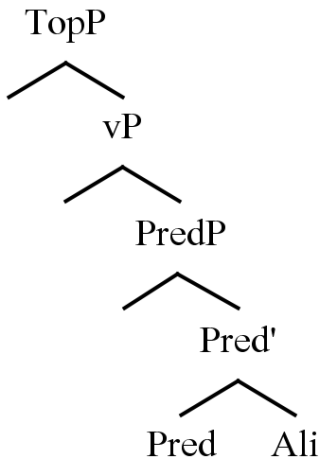
'I think that it's the cook/Ali.'

The structure of the lowered embedded clause is shown in (92). In this example, the spell out of the Pred head is Predicative Lowering. In the example shown in (93), the Pred head is instead spelled out as the invariant copula, despite not being moved to v-bar. My analysis is simply that when Predicative Lowering crashes at the phonetic interface, the invariant copula is the next most available predication strategy within the mental syntax of the speaker and is substituted with no difference in structure or semantics.

92



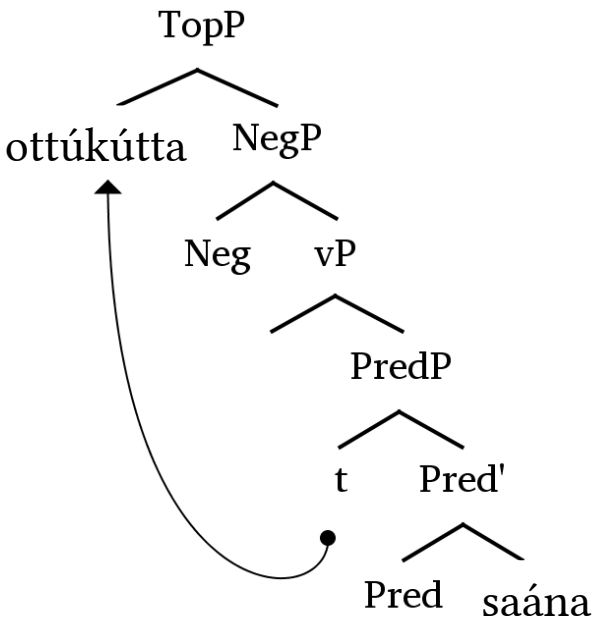
93



[14] No EPP visibly applies in these examples; whether this is because Makhuwa does not require EPP satisfaction within an embedded clause or if there is some other element satisfying this requirement is not clear at this time.

Negation has a rather straightforward underlying structure, shown in (94). The example given is Predicational; the subject and predicate are again base generated in the PredP, but NegP is now present immediately below the Topic domain.

94	ottúkútta	kahí	saána
	15-complain	NEG.COP	well
	'To complain is not good.'		



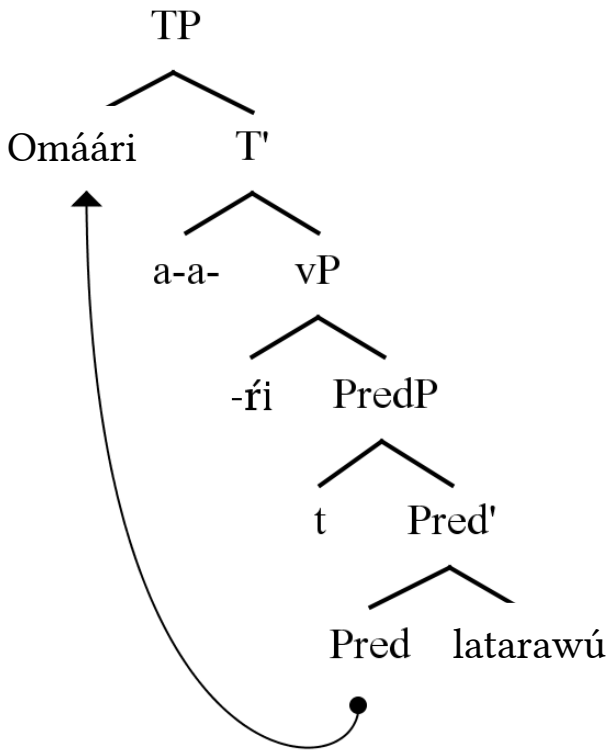
Kahí, being the only visible element not accounted for on the tree, is clearly connected to the Negative domain; furthermore, neither the invariant copula or Predicative Lowering are present, which means the Pred head is otherwise occupied, and thus *kahí* is likely a combination of the Neg spell out *ka* and the Pred head spell out *hi*. We currently have no examples of the negative copula in the non-present, and so the addition of tense to a negative structure cannot be accounted for.

6.4 Non-present

Non-present copular constructions surface similarly to those in the present, but with the introduction of the verbal copula. Makhuwa verbs obligatorily show Agreement for the subject and tense/aspect; subject marking appears on the verbal copula as on a full verb, but the present tense surfaces as a null marker on the copula. The extensiveness of Makhuwa verbs was discussed briefly in section 3.1, and Van der Wal's (2009) analysis of Makhuwa verb raising was mentioned in section 6.2, but in this section I will collapse the verbal inflection into the TP and vP domains, and show it only in its final position. The example shown in (*95*) is a past tense

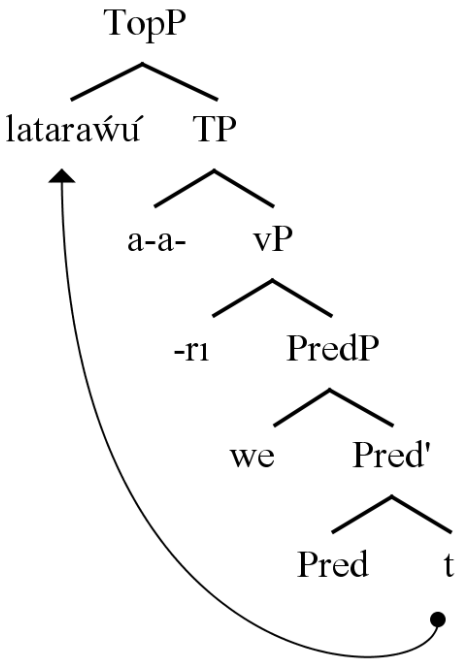
Predicational construction; the verbal copula Agrees with the raised subject and the past tense, as shown in the gloss. The Pred head surfaces as Predicative Lowering, as in the present tense.

95 Omáári a-a-rí latarawú
Omar 1-PST-be thief.PL
'Omar was a thief.'



A past tense Specificational example is shown in (*96*), with the Pred head surfacing as *ti*, as in the present. We again see the two levels of raising as discussed in section 6.1.

96 lataráwú a-a-rí ti we
1.thief 1-PST-be COP 2.SG.PRO
'The thief was you.'

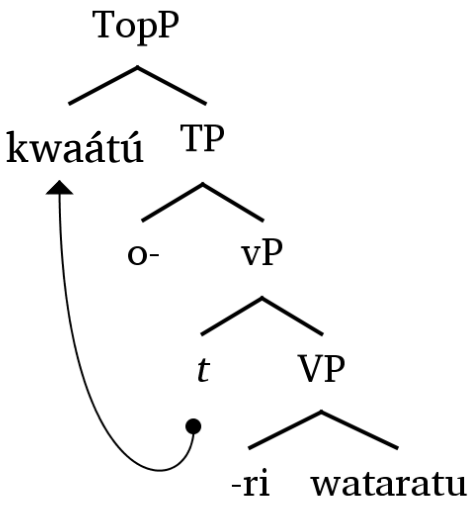


6.5 Locatives

In the tree shown below (97), we see the locative clause from (43) given in its underlying structure. The most important part of this tree for the purposes of this paper is the presence of VP and not PredP. This is because Locative predication in Makhuwa differs little from canonical verbal constructions, but are very different from canonical predication structures.

97

kwaátú o-rí watarátu
cat 1SM-be 16.roof
'The cat is on the roof.'



The two spell outs of the Pred, PL, and *ti* are fully incompatable with Locative predication as discussed in sections 4.1 & 4.2. Furthermore, possible co-occurrence of *ori* and the two Pred spell outs seen in non-present predication clarifies that this lack of ability to use other predication strategies is not simply because of the need to use the verbal copula to express the tense and subject of the clause.

7.0 Conclusion

This paper has worked to describe the surface forms of nonverbal predication in Makhuwa-Enahara. It has been seen that the syntactic type of the predicate has very little effect on the realization of the construction, deference instead is given to clause type and phonological form of the initial element of the predicate. The underlying structures of Makhuwa-Enahara are identical for Equation, Predication, and Identification; Specification shows a different structure, and Locative predication yet another. This is unusual cross-linguistically, as Identification frequently patterns with Specification.

Makuwa-Enahara has three main predication strategies: Predicative Lowering, the invariant copula *ti*, and the verbal copulas *ori* and *okhala*. The first two have been shown to be spell outs of the functional, nonverbal Predication head, and are used to show tenseless, Individual Level qualities. Of these two, Predicative Lowering is not used for Specificational clauses, but is used for Equational, Identificational, and Predicational clauses if the first element of the predicate is over two syllables long. In the event that the predicate does not meet the phonological constraint for Predicative Lowering, the functional head of the PredP instead spells out as the invariant copula *ti*.

There is no difference in meaning between the two spell outs of the Pred head; in the current analysis, the variation instead comes from the fact that Specificational clauses satisfy the Extended Projection Principle by raising the complement of the PredP rather than the specifier. In order to obtain the correct word order in these constructions, the Pred head is then raised to Specv', and from that place spells out as *ti*. There are possible counterarguments to this analysis of Specificational structures: Specv' may not be the correct landing site for the Pred head if it does in fact move, or *ti* could be a spell out of not the functional Pred head but perhaps some sort of FocP. However, there are a limited amount of Specificational constructions in the database used for this study, and very few complex examples (i.e. those involving some sort of raising verb, those with a different element believed to be in the Specv' position, or reverse specificational examples) that could shed further light on the situation. An investigation of pseudo cleft constructions could also increase understanding of the underlying structures, but unfortunately falls just outside the realm of this paper. When the phonological constraint is not met in what would otherwise be a Predicatively Lowered construction, the Pred head does not move but still spells out as *ti*, as the next most available predication tactic in the mental grammar of the speaker.

The verbal copulas, on the other hand, are not directly connected to the PredP domain but are rather a semantically empty spell out for TAM inflection. This allows for co-occurrence of the canonical nonverbal predication strategies and the verbal copula without change in meaning or structure. There seems to be some discrepancy in regard to short predicates in the non-present, more data would be needed in order to say for certain whether the Pred head has a spell out in these instances. When the verbal copula occurs in locative predication it shows the subject's location, rather than the use of PL with a locative predicate, which attributes the

locative as an aspect of the pre-copular element; as of yet no examples with the invariant copula and a locative predicate have been found.

The discussion of copular negation is likewise rather limited as of yet; more investigation should be done. There are currently no negative examples in clauses that should feature the verbal copula, and it remains to be seen whether *kahi*, the nonverbal negator, and *ori* would occur together, or if *ori* would be directly inflected for negation. This paper has presented several strong proposals, but further data collection would go a long way to verify these claims. An analysis of pseudo clefts in Makhuwa would allow further exploration into clefting and equational constructions, and further elicitation through response rather than translation would shed more light on the semantic classes of copular clauses. Appendix 1 presents the beginnings of a questionnaire for further data collection.

8.0 Appendix 1 – Further Data Collection

The prompts in this section are meant to guide further data collection in order to fill in current knowledge gaps and strengthen the arguments made throughout this paper.

8.1 Identificational Predication

There are two types of Makhuwa constructions that could be called Identificational predication: one with a lowered predicate and precopular demonstrative, and one that is a lowered predicate with an empty precopular spot. The latter is what Schadeberg & Mucanheia (2000 p. 125) call identificational in Ekoti (they give the example *siipa* 'it is a lion' versus the citation form: *siípá*), but so far only three Makhuwa examples like this have been collected, all of which are in embedded clauses. This section is meant to see whether these occurrences can happen in stand alone utterances, and if so, if they are perceived as definite or indefinite. These examples are given below as text, but would likely be best elicited through description of pictures or similar stimuli so as to avoid translation bias.

1. It is a lion.
2. It is the lion.
3. It is a bird.
4. It is the bird.
5. It is a crocodile.
6. It is the crocodile.
7. It is Aniitu.
8. It is Ali.

8.2 Non-present Predication

There are some past examples that don't have PL or *ti* and some that do, so it would be helpful to see if this is due to one of the PL-type predications not lowering in the past, or if phonological constraints factor into this distinction. Examples in this section have been constructed with as much care as possible to make them easily distinguishable as to their predication type; those which remain ambiguous through translation only have been given with a context as well.

Specificational

1. The man with the blue shirt was Aniitu.
2. The man with the green shirt was Ali.
3. The animal in the river was a crocodile.

Equational

Context: You go to eat lunch and the person who cooks the food also brings it to you.

1. The waiter was the cook.
2. The cook was the waiter.
3. The cook was you.
4. You were the cook.

Predicational

1. The bird was small.
2. The bird was tall.

3. The bird will be small.
4. The bird will be tall.

Identificational

If the prompts in section 8.1 allow for a distinction between bare Identificational predicates and those headed with a demonstrative then both should be elicited in this section, as they may pattern separately.

1. It was a lion.
2. It was the lion.
3. It was a bird.
4. It was the bird.
5. It was a crocodile.
6. It was the crocodile.
7. It was Ali.

8.3 Negation

Negation in a construction that would feature the verbal copula in the affirmative is currently unaccounted for. It remains to be seen if *ori* carries negative inflection, or if the nonverbal negator would be present. The sentences in section 8.2 should also be checked for their negative counterparts (i.e., 'the bird was not small'), as it would be interesting to see if *kahi* occurs in canonical predication and not Locative, vice versa, or whether it may occur with other elements that are currently believed to be spell outs of the Pred head (*ti* and PL).

Locative Negation

1. The cat was not on the roof.
2. The cat will not be on the roof.
3. The girls were not in Nampula.
4. The girls will not be in Nampula.
5. The girls will not be in Maputo, but in Nampula.

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