



GÖTEBORGS
UNIVERSITET

INSTITUTIONEN FÖR
SPRÅK OCH LITTERATURER

‘NOTHING IS IN VAIN’

Non-Standard Negation and Cyclical Change in
Kutu, Kwere, and Zalamo

Essay/Degree Project:	30 hp
Program or/and course:	AF2210 African Languages master's essay, independent project
Level:	Second cycle
Term/year:	Vt 2023
Supervisor:	Eva-Marie Bloom Ström & Malin Petzell
Examiner:	Henrik Bergqvist
Report nr:	

Abstract

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Abstract: This work concerns the polyfunctionality and grammaticalization of an item *bule* in the under described Tanzanian Bantu languages, Kutu, Kwere, and Zalamo. Through collection and analysis of field data, it is shown that the original adverbial element *bule* ‘for free, in vain, for no reason’ has developed a wide range of functions within the domain of non-standard negation. The innovated functions of *bule* are negative emphatic particle, negative interjection, and negative possessive and locational predication.

The study compares language data from the three languages under study and from five other Tanzanian Bantu languages: Kami, Ndamba, Ndengeleko, Pogolo, and Vidunda. In these languages, *hela/hera* and *-duhu/topo* are found to be almost identical to *bule* in form and function. Through analysis of microvariation, it is proposed that *bule*, *hela/hera*, and *-duhu/topo* all have followed the same pathway of change. Furthermore, it is suggested that the grammaticalization path is cyclical, in which a new item, e.g., *bule* is incorporated into the cycle and follows the same conceptual pattern as a previous item e.g., *duhu*.

Keywords: Bantu, Morphosyntax, Historical Linguistics, Grammaticalization, Descriptive Linguistics, Typology, Negation, Possessive Predication, Locational Predication, Negative Existentials, Semantic Change,

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Glossing abbreviations

This list includes only those abbreviations that differ from, or are not found, in *The Leipzig Glossing Rules: Conventions for interlinear morpheme-by-morpheme glosses* (Comrie et al., 2015). Any other abbreviations found in this thesis follow those conventions.

1, 2, 3... – Noun class 1, 2, 3...

1a – Noun class 1a

1SG, 2SG – 1st, 2nd person singular

1PL, 2PL – 1st, 2nd person plural

AS – Associative

DEP – Dependent clause

DJ – Disjoint

EXPL – Expletive

FV – Final Vowel

HAB – Habitual

NT – Neuter

NCP – Noun class prefix

PRO – Pronoun

TEMP – Temporal/conditional marker

Acknowledgements

A special thanks goes to the linguistic consultants of Kutu, Kwere, and Zalamo; Romy Mtenda, Shukuru Porry, Michael Rashidi, Amos Sulemani, and John Daniel Zangira. Without them, this work would never have been possible. I want to thank my father Mohammed Zahran, especially for his help with felicity judgments and fine-grained semantic and pragmatic interpretations of Swahili sentences. I would like to thank my supervisors Eva-Marie Bloom Ström and Malin Petzell for their invaluable guidance and advice, Malin also for sharing her data, birthing the project idea, and introducing me to the first consultants. Thereto, I would like to thank Ponsiano Kanijo and Lengson Ngwasi for their support during my fieldwork, and Rasmus Bernander for help with finding material and answering questions via email. I also want to thank Fahima Ayub Khan for her help with proof reading and Hana El-Shazli for her help and input on my questions about Arabic. Finally, I would like to thank SIDA and Minor Field Studies for providing the funds for my fieldwork.

1. Introduction

In the languages of the world, negative markers may develop from a range of semantically and grammatically different linguistic items. In a small group of closely related Bantu languages in Tanzania, a rare source item presents itself; a borrowed adverb meaning ‘for free’, ‘in vain’, or ‘for no reason’. In Kutu, Kwere, and Zalamo, the item *bule*, has been borrowed from the Swahili adverb *bure*, and has then developed into a negative marker. Examples (1) and (2) from Kwere show the adverbial and negative emphatic function respectively, whereas example (3) from Kutu shows *bule* as negative interjection ‘no’:

Kwere:

- (1). Ka-ni-g'h-a **bule**¹
 SM1².PST-OM1SG-give-FV **for.free**
 ‘S/he gave (them) to me for free’

Kwere:

- (2). Si-za-hangan-a sang'hano **bule**
 SM1SG-FUT-work-FV 9.work **NEG.EMPH**
 ‘I will absolutely not work tomorrow’

Kutu:

- (3). **Bule**, Juma ha-ben-ile bakuli
 INTRJ Juma NEG.SM1-break-PST 9.bowl
 ‘No, Juma did not break the bowl’

The unlikely development of the adverb *bule* into a negative marker, is merely the first step of a fascinating functional expansion. After the initial developments, *bule* has acquired negative predicative uses, and obtained verb-like morphosyntactic features. Example (4) from Kutu, shows *bule* as a negative interjection but also as a negative possessive predicator:

Kutu:

- (4). **Bule**, n-a-**bule** sang'hano
 INTRJ SM1SG-COP-NEG.POSS 9.work
 ‘No, I don’t have a job/work’

Example (5) shows *bule* in the same predicative function in Zalamo, but with tense marking:

Zalamo:

- (5). Mayo **na-o-bule** hela
 tomorrow SM1SG-NON.PST-NEG.POSS.COP 9.money
 ‘Tomorrow I won’t have any money’

¹ All examples from Kutu, Kwere, and Zalamo, without a reference, are from the author’s own field data.

² SM1 refers to subject marker from noun class 1, which in Bantu languages is also used for the 3rd person singular. SM2 is also used for 3rd person plural.

Examples (6) & (7) show yet another innovated function in Kwere, where *bule* is used in both inversed and plain negative locational predication constructions:

Kwere:

- (6). **H-a-bule**³ ndya ha-moto
SM16_{EXPL}-COP-NEG.LOC 9.food LOC16-kitchen
 ‘There is no food in the kitchen’

Kwere:

- (7). Tati y-angu **ka-h-a-bule** kaidi Chalinze
 9.father 9-POSS1SG **SM1-LOC16-COP-NEG.LOC** again Chalinze
 ‘My father is not in Chalinze anymore’

Despite this wide range of creatively innovated functions, *bule* has still managed to maintain its original adverbial sense, making this a very versatile and polyfunctional linguistic item. By collecting and analysing field data, this work provides a precise mapping of the forms and functions of *bule* in the different languages. Since Kutu, Kwere, and Zalamo are all threatened and largely under-described languages, this work makes a valuable contribution to their documentation and description.

The functional expansion of *bule* is analysed diachronically through patterns of microvariation based both on data from the languages under study and from other Bantu languages, mainly Kami (G36, kcu)⁴, Luguru (G35, ruf), Ndamba (G52, ndj) Ndengeleko (P11-12, ndg), Pogolo (G51, poy), and Vidunda (G38, vid), all spoken in Tanzania. Based on comparative synchronic data and the limited amount of diachronic data available, two parallel pathways of the functional expansion are proposed:

- (i) *adverb* > *negative emphasiser* > *negative interjection*
 (ii) *adverb* > *negative possessive predication*⁵ > *negative inversed locational predication*⁶ > *negative plain locational predication*⁷

Moreover, the diachronic developments are suggested to constitute a so-called ‘recursive cycle’, in which different source items with similar meanings are incorporated onto a grammaticalization path that follows the same conceptual pattern (cf. Heine et al., 1991; Heine

³ The underlying structure of *habule* is *ha-a-bule* in which the first vowel of the expletive subject marker, *ha-*, stemming from the locative noun class 16, merges with the copulative vowel *a*.

⁴ The first code, consisting of a letter and a two digit number is the so called Guthrie Code, a commonly used classification system for Bantu languages. The three letter code is the ISO 639-3 code.

⁵ E.g., ‘I don’t have a phone.’

⁶ E.g., ‘There is no phone on the table.’

⁷ E.g., ‘The phone is not on the table.’

& Reh, 1984). The collected data on Kutu, Kwere, and Zalamo along with the comparative data from the neighbouring Bantu languages identify two different items, *hela/hera* and *-duhu/topo* possessing a nearly identical range of polyfunctionality as *bule*. The functional distributions and near identical morphosyntactic features of *hela/hera*, *duhu/topo*, and *bule* suggests that this cyclical change is an areal feature in this small cluster of languages in Tanzania. Several items having developed an identical polyfunctionality is also taken as evidence that the adverbial senses ‘in vain’, ‘for no reason’, and ‘only’, are semantically conceptualised as being related to the negative functions listed in (i) and (ii) above.

1.1 Research aim

The aim of this Master’s thesis is to investigate and describe the forms, functions, and developments of the originally adverbial element *bule* into a marker of non-standard negation in the East Ruvu languages Kutu, Kwere, and Zalamo.

This thesis contributes to primarily to the linguistic fields of negation, negative marking, and microvariation in Tanzanian Bantu languages. It also aims to contribute to the wider typology of negation marking by describing an unusual semantic expansion. More broadly, any descriptive study involving under-described languages also contributes to our understanding of common patterns, as well as possibilities and limitations of the structuring of human language. Importantly, further description of languages spoken in Africa, or elsewhere in the global south, may challenge current theoretical biases created by overrepresentation of language data from languages of the global north.

1.2 Research questions

The research questions for this thesis are formulated as follows:

- 1) What are the forms and functions of *bule* in Kutu, Kwere, and Zalamo?
- 2) In case of variation, what other items are used to express the same functions?
- 3) How can the development of *bule* and its diverse functions be mapped?
- 4) How does *bule* fit into the typology of similar linguistic items, cross linguistically and in Bantu languages?

1.3 Outline

The thesis is outlined as follows: After the introduction in chapter 1, chapter 2 provides an overview of the languages under study. Chapter 3 introduces key concepts and definitions by revising prominent typological literature on the topics of negation and possessive- and

locational predication. These concepts are exemplified and discussed with a focus on Bantu languages, and some data is provided to illustrate the encoding of these functions in Kutu, Kwere, and Zalamo. Thereafter, some cross linguistically common diachronic developments of negation marking are discussed, and relevant theories are introduced. Chapter 4 deals with the methodology, mainly accounting for the methods used for data collection in the field. Chapter 5 is the most extensive chapter in which the main findings of the thesis are presented and discussed. Finally, chapter 6 summarizes the thesis as a whole and suggests directions for future research.

2. Language Background

The present chapter provides a description of the linguistic situation of Kutu, Kwere, and Zalamo, including geographical distribution, numbers of speakers, language classification, and information about previous and ongoing research.

2.1 Language overview

Kutu, Kwere and Zalamo are three closely related languages, perhaps more accurately described as part of a dialect continuum, spoken in the regions of Pwani and Morogoro, in eastern Tanzania (see Figure 1).

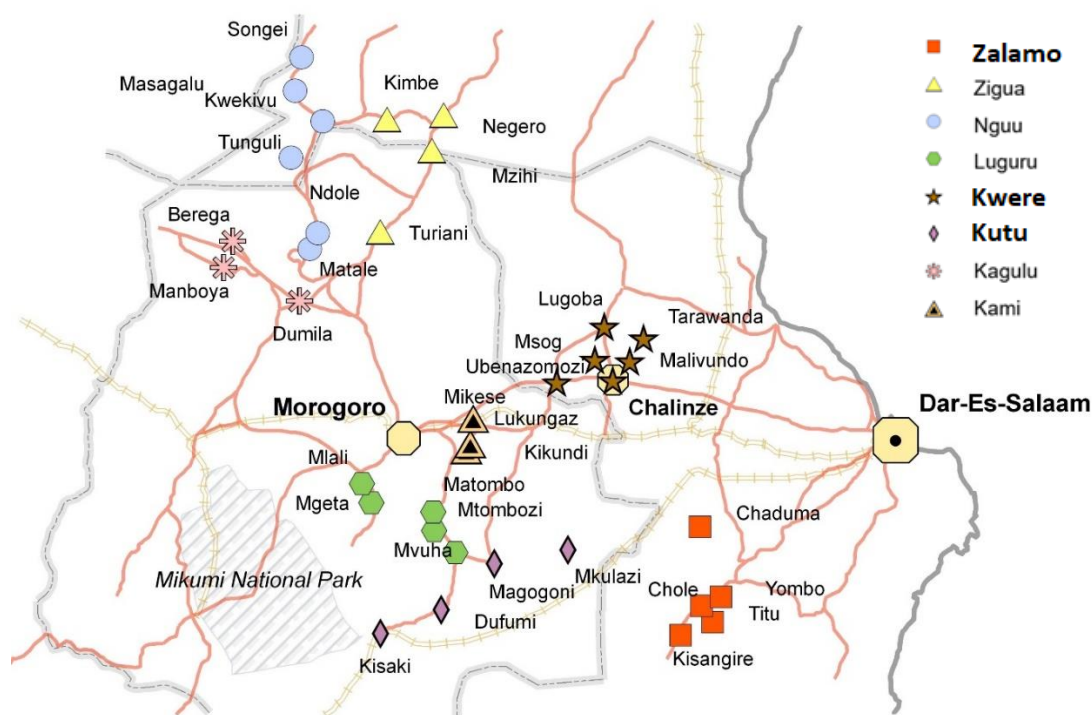


Figure 1: Map of the linguistic centres of Kutu, Kwere, Zalamo, and some closely related neighbouring languages (Petzell & Hammarström, 2013, p. 131)

The area is categorized by a high degree of linguistic diversity, which makes it an interesting research area for microvariation, language contact, and language change. The linguistic situation in Tanzania is characterized by ‘triglossia’ whereby English, while not spoken by most people, is the language used in higher education; Swahili is the national language of wider communication understood by almost everyone; while most people also speak a different heritage language at home as their first language (Petzell, 2012, p. 136).

According to The Languages of Tanzania project (LoT) (2009), Kutu was the 95th largest language in Tanzania with 27 512 speakers in 2009, with almost all of them residing in the rural areas of the Morogoro region. Kwere was the 51st most spoken language with most of its 151 583 speakers residing in the Bagamoyo district; and Zalamo was number 33 with 260 010 speakers mainly found in the districts of Kisarawe and Kibaha, but with a considerable number also in Mkuranga and to some extent Bagamoyo. In the north of the Rufiji district there are around 30 000 speakers of Nyagatwa, which Eberhard et al. (2022), considers a dialect of Zalamo. The figures presented by LoT (2009) include speakers that have the languages as a second and third language, which means that the number of fluent speakers is probably significantly lower (cf. Petzell & Aunio, 2019, p. 563 for Kami).

Kutu, Kwere, and Zalamo are all considered threatened and are losing their speakers according to Eberhard et al., (2022). Zalamo is also considered ‘critically endangered’ in the Catalogue of Endangered Languages (2023). Legère (2021, p. 5), writes that in Kwere there has been an erosion of linguistic competence and a massive shift to Swahili. He considers both the language and the identity of the Kwere to be threatened.

All three languages are heavily influenced by Swahili. They have sustained durable language contact with other Tanzanian Bantu languages, including Swahili, since the 19th century (cf. Gonzales, 2002). More recently, the influence of Swahili is largely due to its high status as lingua franca and the ‘Swahilization’ policies introduced in the 1960’s, consolidating the use of Swahili in all social domains, essentially at the expense of all other languages. As all speakers of Kutu, Kwere, and Zalamo, are at least bilingual with Swahili, and speak Swahili daily, code-switching and borrowings are very frequent. The vitality of all three languages is decreasing and there is strong urgency of documenting all of them (cf. Legère, 2006)

2.1.1 Classifications

In the geographical Guthrie classification of Bantu languages, Kutu, Kwere, and Zalamo belong to the G30 group. Kutu is G37 (ISO: kdc), Kwere, is G32 (ISO: cwe), and Zalamo is G33 (ISO:

zaj) (Hammarström, 2019, p. 37). The language names in the respective languages are King'hutu, Chingh'wele, and Kizalamo.

In terms of genealogical classification, Kutu, Kwere, and Zalamo, together with Kami G36, can be considered the nucleus of the 'Zalamo group' (Nurse, 1970, p. 45), better known as the East Ruvu languages. Doe and sometimes Luguru are considered slightly more distant members of the same group (cf. Gonzales, 2002; Hammarström et al., 2022; Nurse & Philippson, 1980, 2003). Consider the percentages of shared core vocabulary between the languages, illustrated in Figure 2:

Doe					
89.5	Kwere				
82.5	86	Zalamo			
81	84.5	93	Kutu		
83.5	88.5	88.5	86	Kami	
73.5	79.5	84	80	85.5	Lugulu

Figure 2: Percentage of shared core vocabulary in East Ruvu-Luguru (Gonzales, 2002, p. 32)

The East Ruvu group, belong to the Greater Ruvu language group of Northeast Coastal Bantu (NEC). The previous classification attempts of the Greater Ruvu present a few differences, notably regarding the classification of the Seuta languages (Shambala G23, Bondei G24, Zigua G31 and Nguu G34). Hammarström et.al (2022) classifies the Seuta languages as part of the West Ruvu, a view that to the best of my knowledge is not supported elsewhere. Nurse and Philippson (1980, p. 50) divide the Greater Ruvu into West Ruvu on the on hand and the three different branches Lugulu/East Ruvu/Seuta on the other, thus putting the Seuta languages closer to the East Ruvu. Petzell & Hammarström (2013, p. 153) suggest that the Seuta group is to be moved up to a higher node in that tree, which also seems to be supported by Hinnebusch (1981, p. 118) who writes that the Seuta group is clearly demarcated within the Greater Ruvu. Furthermore, it should also be noted that while Sagala G39 and Vidunda G38 mostly have been classified as West Ruvu, the more recent classification of Bantu languages by Nurse and Philippson (2003) puts them together in a group with the East Ruvu-Luguru languages based on lexical, phonological, and morphological parameters. The full classification from Nurse and

Hinnebusch (2003, p. 169) places the languages from the greater Ruvu into the three following groups⁸:

- (i) G11 Gogo, G12 Kagulu
- (ii) G23 Shambala, G24 Bondei, G31 Zigua, G34 Nguu
- (iii) G32 Kwere, G33 Zalamo, G35 Luguru, G36 Kami, G37 Kutu, G38 Vidunda and G39 Sagala

Petzell and Hammarström (2013, p. 133) write that this classification shows “major agreement” with their comparative study of the greater Ruvu languages. Based on a comparison of grammatical (morphophonological and morphosyntactic) parameters, a wordlist of 500 words, and speakers’ self-assessment, they investigated linguistics similarity and concluded that the 8 Ruvu languages included in their study can be grouped together in the following manner (ibid, p. 153):

- (i) Kami, Kutu, Kwere and Zalamo
- (ii) Nguu and Zigua
- (iii) Kagulu
- (iv) Luguru

Among the languages included in the present thesis, Kwere and Kutu are grammatically the most similar, whereas the highest degree of lexical similarity is found between Zalamo and Kutu. The degree of grammatical similarity between the Ruvu languages are illustrated in Figure 3, whereas Figure 4 illustrates lexical similarity.

Kami	46						
Kutu	42	81					
Kwere	42	73	92				
Luguru	70	58	66	66			
Nguu	76	37	36	44	54		
Zalamo	44	83	74	66	60	26	
Zigua	50	46	40	48	42	67	38
	Kagulu	Kami	Kutu	Kwere	Luguru	Nguu	Zalamo

Figure 3: Degree of grammatical similarity between the Ruvu languages, with Kutu, Kwere and Zalamo highlighted (Petzell & Hammarström, 2013, p. 148)

⁸ G301 Doe is not included in their survey.

Kami	53								
Kutu	54	67							
Kwere	57	67	70						
Luguru	54	65	62	62					
Nguu	57	58	56	62	57				
Swahili	47	55	50	57	55	60			
Zalamo	54	67	76	69	62	54	48		
Zigua	51	54	52	58	51	68	51	53	
	Kagulu	Kami	Kutu	Kwere	Luguru	Nguu	Swahili	Zalamo	

Figure 4: Degree of lexical similarity between the Ruvu languages, with Kutu, Kwere and Zalamo highlighted and Swahili as reference point (Petzell & Hammarström, 2013, p. 150)

2.1.2 Available material and earlier research

There are no grammars and very little published linguistic material on the languages included in this study. To the best of my knowledge, there is no linguistic work exclusively focusing on Kutu. On Kwere, there is a recent wordlist (Legère, 2021) and an honour's degree thesis on the noun phrase (Möller, 2011). There are two brief grammar sketches available on Zalamo, dating back more than a century (Meinhof, 1907; Worms, 1897), and an even older work containing a wordlist and some short phrases (Steere, 1869). Some historical and sociolinguistic information about the languages and the speaker communities is available and there are some comparative studies that includes data, such as short wordlists, from all three languages (cf. Gonzales, 2002; Johnston, 1919). The most recent comparative study is a lexical and grammatical comparison of the Greater Ruvu Bantu languages, Kagulu, Zigua, Kwere, Zalamo, Nguu, Luguru, Kami and Kutu, by Petzell and Hammarström (2013). The comparison tests a range of morphophonological and morphosyntactic parameters, a lexicon of 500 entries, and speakers' self-assessment of linguistic proximity between the languages.

Translations of the Bible are available in all three languages. Bible translations can be useful as a source for language data especially in a comparative perspective, but caution is advised since they do not contain naturally occurring language and can be thought of as prescriptive rather than descriptive.

Kutu, Kwere, and Zalamo are all included in the ongoing research project 'To break or be broken – A study of valency-decreasing alternations in East Ruvu Bantu languages' by Malin

Petzell, Sebastian Dom, Leora Bar-El, and Ponsiano Kanijo, see for example (Bar-el & Petzell, 2021).

3. Theoretical Background

This section presents the background of the key concepts and theories, relevant to this thesis. The innovated functions of *bule* are all related to different types of negation, outside the domain of ‘standard negation’. Therefore, this chapter begins by establishing ‘negation’ as a functional category, followed by an introduction of standard negation. Standard negation serves as the point of departure from which the relevant ‘non-standard negation’ categories will be distinguished. These categories include emphatic negation, negative interjections, and especially negation of possessive and locational predication.

The final section of this chapter discusses negation from a diachronic perspective and identifies different sources of negation markers and typologically common developments.

3.1 Negation

The functional category of negation may be formally encoded in a variety of different ways both cross-linguistically as well as language internally, which is why the definitions herein must be based on functional properties. *Negation* here refers to function, whereas *negator*, *negation strategies*, and *negative marking* all refer to the formal, morphosyntactic strategies applied to encode negation in natural language.

Negation as a functional category is believed to be a language universal, i.e., it can be found in every language in the world (cf. Dahl, 1979; Miestamo, 2005). As with many functional categories in natural language, there are prototypical, semantic, core features, as well as a potentially wide range of more peripheral and language specific functions. The universal meaning of negation can be described using predicate logic, in which it is defined as an operator that changes the truth value of a proposition p into to its opposite $\neg p$ (“not p ”) (Miestamo, 2017, p. 405). Similarly, Dahl (1979, p. 80) defines the semantic universal of negation as “a means for converting a sentence S_1 into another sentence S_2 such that S_2 is true whenever S_1 is false, and vice versa”. By defining the core feature of negation as a change in truth value, negation is identifiable as such in every natural language in the world.

Nevertheless, negation is typically multifaceted in natural language, and it often expands well beyond the basic notion of a change in truth value. Therefore, negation in natural language cannot be solely defined by its logical elements, but one must also consider its important

pragmatic components. Accounting for the many intricate pragmatic functions of negation goes beyond the scope of this thesis, but to give an example, Givón (2018, pp. 100–101) illustrates the discourse pragmatic effects of negation with the following two hypothetical answers to a very general request of new information:

- (8). A: – What’s new?
 B: – My wife is pregnant.
 A: – Congratulations!
- (9). A: – What’s new?
 B: – My wife isn’t pregnant.
 A: – Gee, was she supposed to be?

The obvious bizarreness of the negative answer in (9), triggering a baffled response, is of course due to the lack of an affirmative assumption of participant B’s wife being pregnant, as part of the common ground. Consequently, Givón (2018, p. 101) construes that:

Negative assertions are, it seems, made on the tacit assumption that the hearer either has heard about, believes in, is likely to take for granted, or is at least familiar with the corresponding affirmative.

The negative assertion by speaker B would be pragmatically appropriate if speaker A indeed believed that the wife was pregnant. Givón (2018, p. 103), therefore construes negative assertions to be a speech act of their own, used by a speaker to “correct the hearer’s misguided beliefs”.

The discourse pragmatic functions of negation further brings us to the concept of emphatic negation, sometimes referred to as reinforced or intensified negation. As pointed out by Eckardt (2006, p. 129) and Larrivé (2020, p. 567), these terms are commonly used, but less commonly defined, in the literature. Emphatic negation is frequently exemplified by, or mentioned in relation to, expressions like the English ‘at all’, or multiple negation markers like the French ‘ne...pas’. More often than not, ‘emphatic negation’ is left to be intuitively interpreted by the reader. In this thesis, drawing from the works of Eckardt (2006), Larrivé (2020), and Wouden (1997), the main characteristic of emphatic negation is considered to be its scalar relation to a more default form of negation. In other words, a negative assertion is made stronger by the addition of an emphatic negative marker. The strengthening of the negation can of course serve different purposes in different discourse pragmatic contexts, but it is never used for nothing. As pointed out by Wouden (1997, p. 245), the use of emphatic negation can be understood in terms of Horn’s Division of Pragmatic Labour, which states that if a speaker uses a marked (more complex) expression, when there is an unmarked (simpler) one at their disposal, the message is

interpreted as more marked, and containing extra information (Horn, 1984, p. 22). This strengthening also tends to make subsequent hedging of an utterance much more questionable with emphatic negation as opposed to with default negation; which is illustrated by the (in)felicity of the following examples from Larrivée (2020, p. 567) in French:

(10). J'ai pas dormi. Peut-être un petit peu, mais pas beaucoup.
'I didn't sleep. Maybe a little, but not much'.

(11). #J'ai **rien** dormi. Peut-être un petit peu, mais pas beaucoup.
'I slept not **at all**. Maybe a little, but not much'.

A diachronic account of emphatic negation will be expanded on a little bit in section 3.3.2 on Jespersen Cycles.

3.1.1 Standard negation

The most basic type of verbal, or clausal, negation is often referred to as *standard negation* (SN). In this paper, following previous prominent works on negation (Dahl, 1979, 2010; Krasnoukhova & van der Auwera, 2020; Miestamo, 2017, 2005; Payne, 1985), SN is defined as the productive, pragmatically neutral, negation strategy(ies) in a language used to negate declarative main clauses with a verbal predicate.

Early typological studies on negation (Dahl, 1979; Payne, 1985), based their sample on a type of negation that has generally been seen as a basic form, described by Dahl as “simple indicative sentences with a verbal predicate” (1979, p. 79). The term standard negation was first introduced by Payne (1985), for a similarly defined functional category. Payne (1985, p. 198) writes that SN is easily identifiable by its use in “the most minimal and basic sentences”. These basic sentences, he argues, typically consists of a main clause with a single predicate and as little other linguistic material as possible, such as weather sentences in English involving predicates of zero-valency and a dummy subject, e.g., *'It is not raining'*. When multiple noun phrases and/or adverbial modifiers are involved, negation markers may start interacting with a wide range of morphosyntactic parameters and language specific constraints, resulting in divergence in negative marking from the most basic clause types.

Formally, there are three main strategies for marking SN: negative affixes, negative particles, and negative verbs (Dahl, 1979; Payne, 1985). In a specific language, a standard negator may be used also in non-standard negative constructions. Consequently, the identification of a SN-negator is done in SN-domains, after which any other functional domains negated by the same marker can be identified (cf. Payne, 1985).

3.1.2 Non-standard verbal negation

Cross linguistically, the subjunctive and the imperative moods, along with relative and subordinate clauses commonly use different morphosyntactic negation strategies from SN. The typological study of prohibitives (defined as second person singular negative imperatives) by Auwera et al., (2013), shows that negative imperatives are very prone to divergence. Their study divides languages into four types based on the combination of two different parameters: whether the prohibitive negator is the same as the one used for declaratives, and whether the verbal construction for prohibitives is the same as for positive imperatives. A majority (328) of the 495 languages included in the survey were shown to use a different negation strategy compared to declarative clauses, and the results also showed that the most widespread strategy for prohibitives in Bantu is having both a different negator from declaratives and a different verbal construction than the one used with positive imperatives. The negation strategies used both in declarative and non-declarative clauses in Bantu, will be expanded on in the next section.

3.1.3 Verbal negation strategies in Bantu

The divide between negation of declarative vs non-declarative sentences is highly relevant for Bantu languages, given that the use of different negation strategies based on this distinction can be traced back to their reconstructed common ancestor *Proto-Bantu*. There seems to be some consensus in the literature regarding the fact that at least binary distinction of negation strategies between indicatives and subjunctives can be traced back to Proto-Bantu⁹ (Kamba Muzenga, 1981; Meeussen, 1967; Nurse, 2008). The distinction between Proto-Bantu negation strategies might even have been threefold between indicatives, subjunctives, and relatives. Both Meeussen (1967) and Kamba Muzenga (1981), suggest that this might have been the case, largely based on the threefold distinction being widely attested in modern day Bantu languages. Nurse (2008, p. 189), on the other hand, suggests that the three-way distinction could have been a more recent innovation since it is more geographically limited than the two-way distinction.

Briefly expanding on the synchronic attestation of multiple verbal negation strategies in Bantu, only very few languages included in Nurse's (2008, p. 185) extensive sample use a single negator. Most have two or more, with their distribution typically being determined by a distinction between declarative main clauses on the one hand, and subjunctives and/or relative clauses, on the other.

⁹ Although see Güldemann (1999) for some reasonable criticism

In terms of formal marking of verbal negation in Bantu, affixes are the most common strategy, which is not surprising considering the rich verbal morphology that typifies Bantu languages. For the non-Bantuist reader, the Bantu verb is characterized by an agglutinative structure, in which the verb root may take several prefixes and suffixes. Broadly, subject and object marking occur as prefixes, very often together with TAM marking, although certain TAM categories might also occur as suffixes. Derivational categories, also called verbal extensions (for example passive, causative, and applicative), are encoded by suffixes (cf. Meeussen, 1967). The affixes typically have fixed order, and their positions are often referred to as *slots* in the verbal template. This is illustrated with the following template, slightly simplified from Meeussen (1967) by Güldemann (1999, p. 546):

Slot	Pre-initial	Initial	Post-initial	Pre-radical	Root	Pre-final	Final	Post-final
Function	TAM/ Polarity	Subject	TAM/ Polarity	Object	Verbal root	Derivation/ TAM	TAM	Clause type/ Polarity

Negative affixes in Bantu may occur either pre-initially (before the subject marker), or post-initially (after the subject marker) and sometimes combine with a negative final suffix. Affixes are widely used in Bantu for both declarative and non-declarative negation, and historically, it seems likely that pre-initial negative affixes were used in indicative, absolute tenses, while the post-initial ones were preferred with infinitives, subjunctives, imperatives¹⁰, and relatives (Meeussen, 1967, p. 114). This distinction in placement is attested to different degrees in several modern Bantu languages, and Güldemann (1999, p. 551), generalizes that:

“While the postinitial negation strategy is rarely subject to distributional restrictions with regard to major clause types, preinitial negation shows a strong tendency to be confined to unmarked main clauses.”

To illustrate some of the possible variations of how languages make use of pre- vs post-initial negative affixes, Swahili G42, Bena G63, and Kagulu G12, are used here as examples. In Swahili, the historical distribution of pre- vs post-initial prefixes, suggested by Meeussen (1967), is largely preserved. Indicative verbs in main clauses are negated through a pre-initial negation prefix *ha-* (*si-* for the first person singular). In the present tense, the tense marker is dropped, and the negative prefix combines with a negative suffix. Some tenses, such as the past

¹⁰ Most Bantu languages do not have distinct form for negative subjunctives and imperatives, but in some languages innovated constructions, typically with auxiliaries, have given rise to such a distinction (Nurse, 2008, p. 193)

and the perfect have their own negative tense marker, whereas the future tense marker remains the same. This stands in contrast to negative subjunctives, imperatives, and relative constructions¹¹ that all take the negative prefix *si-* in the post initial slot, exemplified with the subjunctive in (14):

Swahili G42 (own knowledge):

- (12). Tu-ta-on-a
SM1PL-FUT-see-FV
'We will see'
- (13). **Ha**-tu-ta-on-a
NEG-SM1PL-FUT-see-FV
'We won't see'

Swahili G42 (Mpiranya, 2015, p. 85):

- (14). U-**si**-on-e
SM2SG-NEG-see-SUBJ
'So that you may not see'

In Bena and Kagulu, the distribution between negative prefixes in the pre- and post-initial slots is not as uniform as in Swahili. Speakers of Bena, spoken in southern Tanzania, may use the negative prefix *si-* in either slot, with verbs in the indicative mood (15), but infinitives and relative clauses are negated with a dedicated post-initial prefix (16):

Bena G63 (Morrison, 2011, pp. 284, 287)

- (15). **si**-ndi-i-gon-a / ndi-**si**-i-gon-a
NEG-SM1SG-PRS-sleep-FV / SM1SG-NEG-PRS-sleep-FV
'I'm not sleeping.'
- (16). hu-**ta**-kagul-a
INF-NEG-know-FV
'To not know'

Similarly, in Kagulu G12, the two negative prefixes *si-* and *ng'ha-* may be used both pre- and post-initially in many different contexts, although for the negation of the subjunctive and negative imperative, *ng'ha-* is consistently used post-initially (Petzell, 2008, p. 127). Moreover, both Bena and Kagulu apply non-standard negation strategies with negative auxiliaries for other types of non-standard verbal negation. Bena for subjunctives (Morrison, 2011, p. 288) and Kagulu for infinitives (Petzell, 2008, p. 128). Example (17) from Kagulu shows a negative infinitive construction with the common negative auxiliary *leka* 'leave'. In a wider, cross-

¹¹ This refers to verbs with relative prefixes, not the complex relative constructions with 'amba-' (cf. Mpiranya, 2015, p. 73).

Bantu, perspective, negative auxiliaries have been noted by Nurse (2008, p. 183) to also have a strong preference for imperative and relative constructions.

Kagulu (Petzell, 2008, p. 129):

- (17). ku-lek-a ku-lim-a
 INF-leave-FV INF-cultivate-FV
 ‘Not to cultivate’

Another common negation strategy in Bantu, although relatively rare in East Bantu, is the use of post-verbal particles (Devos & van der Auwera, 2013; Nurse, 2008, p. 180). Negative particles are defined by Dryer (2013) as negative words that do not take any verbal inflection. Following this definition, Bernander et al., (2022) show that they are commonly used as the only component of standard negation marking in a cluster of languages spoken in Southern Tanzania. The study of Bernander et al., (2022) compares the formal and functional properties of post-verbal particles in 11 Tanzanian Bantu languages. About half of the languages included in their study have more than one negative particle that alternate. In some Bantu languages spoken in other areas, two or even three particles may be stacked together, often for emphatic effects (cf. Devos & van der Auwera, 2013). For the southern Tanzanian languages with multiple particles, the distribution of alternating particles is not entirely clear, and they have often been reported to be used interchangeably. It has, however, also been suggested that their use might depend on dialectal variations, levels of formality, or sometimes one particle is interpreted as more emphatic than another (Bernander et al., 2022, p. 69). Consider the example from Manda N11 below, in which the negative particle used here, *lepa*, is more associated with emphatic readings:

(18). *Manda N11* (Bernander, 2017, p. 316)

- Sospéter a-píg-a **lépa**
 Sospeter SM1-call-FV NEG
 ‘Sospeter NEVER calls.’

Moreover, Bernander et al. (2022) write that these particles are often used to mark negation other than SN. They are consistently used as negators in non-standard verbal negation, although somewhat less frequently with negative imperatives and subjunctives. Thereto, these particles can be used on their own as a negative interjection meaning ‘no’, and they are also together with a copula to negate different types of non-verbal predications. As will be shown in chapter 5, this pattern is identifiable also in the use of *bule* in Kutu, Kwere, and Zalamo.

3.1.3.1 Verbal negation in Kutu, Kwere, and Zalamo

Kutu, Kwere, and Zalamo are all typical Bantu languages in the way that they mark negation. Standard negation is marked by means of a pre-initial prefix, *si-* for the first person singular and *ha-* for all other persons:

Kutu/Kwere:

- (19). **Si**-lond-a ku-som-a
 NEG.SM1SG-like-FV INF-read-FV
 ‘I don’t like to read’

Zalamo:

- (20). wana **ha**-wa-ki-nogel-a
 2.child NEG-SM2-RECP-like-FV
 ‘The children do not like each other’

Other categories like infinitives, conditionals and prohibitives make use of auxiliary constructions. The lexical meaning of the auxiliary verbs is not always clear, such as *gambe* in (22) and *seke* in (23). They do however show the formal morphosyntactic properties expected of an auxiliary in these constructions, namely that they occur with what seems to be a negative prefix and a final subjunctive vowel. While a full analysis of these items goes beyond the scope of the study, it seems like at least *seke* could be on a grammaticalization path that is well attested in Bantu, in which an auxiliary is phonologically reduced and eventually reanalysed as a verbal affix (Nurse, 2008, p. 193). The glossings here are meant to highlight the constructions as auxiliaries, otherwise more functional glossings are possible, such as *seke* as PROH(IBITIVE).

Kutu:

- (21). **Ku-lek-a** ku-w-a na sendi, vidala
 INF-leave-FV INF-be-FV COM 9.money 8.difficult
 ‘To not have money is difficult’

Kwere:

- (22). **si-gamb-e** u-m-bwak-ile
 NEG-AUX-SBJV SM2SG-OM1-scold-PST
 ‘You should not have scolded him/her’

Zalamo:

- (23). Gwe mwana! **Sek-e-u-hand-e** m-dibiki!
 PRO2SG 1.child AUX-SBJV-SM2SG-climb-SBJV LOC18-5.tree
 ‘Hey, child! Do not climb in that tree!’

Post verbal negative particles are not part of standard negation in the languages under study and will be discussed in detail in chapter 5.3.

3.2 Possessive and locational predication and its negation

Possessive and locational predication is commonly negated using different strategies than the one(s) used for standard verbal negation. Based on the development of *bule* into a negative non-verbal predicator in Kutu, Kwere, and Zalamo, the following sections will introduce the relevant types of predicative constructions, followed by typologically common negation strategies.

3.2.1 Possessive predication

Just like negation, *possession* is a universal linguistic domain (Heine, 1997, p. 1). According to Heine (1997, p. 25), all documented languages also have a morphosyntactic distinction between adnominal possession like ‘my book’ on the one hand, and *predicative possession* like ‘I have a book’, on the other. The latter, is described by Stassen (2013) as constructions in which ownership of a certain object, *possessee*, is predicated of a *possessor*, simplistically represented by Heine (1997, p. 44) as ‘*X has/owns Y*’. This is the type of construction relevant for the present work. Without going too deep into the extensively studied semantics of predicative possession, I will adhere to Stassen’s (2009, p. 11) uncontroversial definition that possession necessarily involves two entities forming an asymmetric relationship in which the possessee ‘belongs’ to the possessor. The type of possessive predication relevant is also limited to what Creissels (2022) refer to as *plain predicative possession* with the unmarked perspectivization *possessor* > *possessee*, such as ‘John has a book’, rather than *inversed predicative possession* expressing the marked perspective *possessee* > *possessor*, as in ‘The book is John’s’, which tend to use different predicative elements.

Predicative possession is a typologically well studied topic (cf. Chappell & Creissels, 2019; Heine, 1997; Stassen, 2009, 2013 and references therein) (and for Bantu, Creissels, 2022). Stassen (2009) proposes four different types of predicative constructions; the *Locational Possessive type*, the *With-Possessive type*, the *Have-Possessive type*, and the *Topic Possessive type*. The first three seem to be widely accepted, whereas the validity of the fourth one has sustained some criticism (cf. Chappell & Creissels, 2019; Creissels, 2022). Creissels (2022) suggests that there is also a basic binary distinction between *possessor centered* and *possessee centered* constructions. The possessor centered ones comprise the Have-possessive type and the With-Possessive type, of which the latter, he argues, can be divided into the two subcategories *Incorp Possessive* and *Comit Possessive*. For extensive definitions of all these categories, and discussions, the reader is referred to the original sources. Here, only the relevant types the Have-

Possessive type and the Comit-Possessive type will be briefly expanded on since they are the ones that are attested in Bantu (Creissels, 2022, p. 11).

The Comit-Possessive type is the most dominant one. In Bantu languages, this type is typically formed using a copula or a copular verb ‘be’ plus the comitative marker *-na* ‘with’, or in some cases with zero-copula construction and just the comitative marker. It is also possible that there is language internal variation between different types, often depending on TAM and/or polarity. In the Swahili examples below, the construction in the past tense in (24)a makes use of the copular verb *kuwa* ‘be’, whereas there is no predicative element preceding the comitative *na* in the present tense in (24)b:

Swahili (own knowledge):

(24). a) A-li-**kuw**-a **na** mfuko.
 SM1-PST-**be**-FV COM 3.bag
 ‘S/he had a bag.’ (lit. ‘S/he was with bag’)

b) A-**na** mfuko
 SM1-**POSS.COP** 3.bag
 ‘S/he has a bag.’

Creissels (2022, p. 12) analyses the latter as a zero copula construction and writes that it is a re-occurring pattern for languages with Comit-Possessives to have a zero copula construction in the present tense. From a strictly synchronic and functional perspective, however, Marten (2013, pp. 52–53) presents evidence that *na-* is a highly polyfunctional marker in Swahili. In Marten’s (2013) view, *-na* functions as possessive copula in constructions like (24)b. Expanding on that line of thought, evidence of a reanalysis of *-na* into a possessive copula can be found in the construction in (25), referring to the past tense. Here, *-kuwa* functions as an auxiliary carrying tense marking, which is followed by *-na* that takes subject marking and again functions as a copular element.¹²

Swahili (Hurskainen, 2016):

(25). kwamba a-li-kuw-a a-**na** habari njema
 if SM1-PST-be-FV SM1-**POSS.COP** 9.news 9.good
 ‘...if s/he had good news’ (lit. ‘if s/he was s/he has good news’)

The reanalysis of *-na* from a comitative marker into a possessive copula would arguably make the constructions in (24)b and (25) classifiable as a Have-Possessive types in which the

¹² The construction with *-kuwa* with past tense marking followed by a verb in the present tense is a common construction to express an ongoing event in the past (cf. Mpiranya, 2015, p. 102)

possessor and possessee are encoded like an Agent-Patient relation in a transitive predication (cf. Creissels, 2022, p. 3).

Besides the fact that Comit-Possessive constructions are found in other tenses, *-na* can be assumed to have occurred with a copulative element also in the present tense. This assumption is based on the preservation of a supposedly older construction in relative constructions in the present tense. In relative clauses, the older copula *-li* is preserved and is followed by *-na* in the comitative function, as shown in (26). This further strengthens the idea that the Have-Possessive with *na-* shown in examples (24)b and (25) is historically developed from a Comit-Possessive type.

Swahili (Hurskainen, 2016):

- (26). Mtoto a-**li**-ye **na** mfuko
 1.child SM1-COP-REL COM 3.bag
 ‘The child who has a bag’ (lit. ‘The child who be with bag’)

The exact same pattern of *-na* seemingly being used as a comitative, but then reanalysed as possessive copula is found in Kutu, Kwere, and Zalamo. A missing piece of evidence would only be a construction parallel to the one in (25), which I have not been able to verify yet. In examples (27)a-c from Kwere below, the use of *-na* is illustrated as a comitative with a copular verb (a), as possessive copula (b), and finally in a presumably older form preceded by the copula *-li* in a relative clause (c). Kutu, Kwere, and Zalamo may consequently be considered “typical Bantu languages” in the sense that they use a Comit-Possessive type for predicative possession, which has developed into a Have-Possessive type for certain tense-aspect categories.

Kwere:

- (27). a) Chi-za-**kuw**-a **na** ugali
 SM1PL-FUT-**be**-FV COM 11.ugali
 ‘We will have ugali’
- b) gweye ku-**na** simu
 PRO2SG SM2SG-**POSS.COP** 9.phone
 ‘You have a phone’
- c) n-i-m-on-a munhu ye-**li** **na** ng'ombe
 SM1SG-PST-OM1-see-FV 1.person DEP¹³.SM1-COP COM 9/10cows
 ‘I saw a person who has cows’

Negative predicative possession is one of the main functions of *bule* identified in the languages under study. This topic will be dealt with in detail in chapter 5. As will be shown, there are both

¹³ The subject marker for noun class 1 (3rd pers. singular) *y-* is used instead of *k-* in dependent clauses “such as conditionals, relatives, and with some auxiliaries in all East Ruvu languages” (Bar-el & Petzell, 2021, p. 540)

similarities and differences when it comes to formal and functional features of *-bule* in negative predicative possession compared to *-na* in affirmative predicative possession.

3.2.2 Locational predication

Based on Creissels (2019), locational predication is herein understood as an expression of an “episodic spatial relationships involving two concrete entities” (p. 38). The two entities are referred to as the *figure* and the *ground*. The figure is a “mobile entity”, e.g., a person or a cell phone, whereas the ground occupies a fixed position in space, or is at least less mobile in comparison to the figure, e.g., a house or a table. This episodic, spatial relationship can be viewed from different perspectives, and may consequently be encoded differently in natural language based on whether the figure or the ground is thought of as the perspectival centre. This is referred to as *plain vs inversed* locational predication.

In plain locational predication (PLP), the figure constitutes the perspectival centre, and the relationship between the entities is ‘figure-to-ground’, as in:

- (28). A) ‘The woman is in the house’
 B) ‘The phone is on the table’.

The higher degree of mobility possessed by the figure gives it higher saliency regardless of information structure, which is why the construction *figure>ground* (FG>GR) is considered unmarked (Creissels, 2019, p. 41). These unmarked PLP constructions typically follow canonical word order, which is also the case in Kutu, Kwere, and Zalamo. In all three, the subject occurs before the predicative element, which is either a copula verb, or a zero-copula construction with subject and locative marking directly prefixed to the noun¹⁴:

- Zalamo*:
 (29). Kimulimuli ch-angu cha-ha-meza
 7.phone 7-POSS1 SM7-LOC16-9.table
 ‘My phone is on the table’

In inversed locational predication (ILP) on the other hand, as the name suggests, the perspective of the same spatial relationship is inversed. Here, the perspective is ‘ground-to-figure’ (*ground>figure*) (GR>FG), which means that the ground constitutes the perspectival centre. These constructions are thus considered more marked, and typically serve a conversational function of identifying the presence of an entity in a certain place (Creissels, 2019, p. 41), like the sentences in example (30).

¹⁴ The vowel *a* of the subject marker could potentially be a trace of a copulative element

(30). A) ‘There is a woman in the house’

B) ‘There is a phone on the table’

Borrowing an analogy from Creissels (2022), the perspectivization FG>GR can be conceptualized as a camera following a protagonist woman into the house, after which someone could say (28)a. On the contrary, GR>FG can be thought of as a security camera set up in a house, capturing a woman on tape, providing a context for the sentence in (30)a.

Just like the English examples in (30), IPL constructions must be formally distinct from PLP constructions. They often use non-canonical word orders and they are characterized by the use of an expletive dummy subject, often derived from some locative element (Creissels, 2019). This is also the case in Kutu, Kwere, and Zalamo, that all have ILP constructions expressing this perspectival change. Here, subject marking on the predicative element is non-agreeing with the figure, which is also analysable as having the semantic role of *theme*. As is typical in Bantu, the subject marker is instead one of the locative nominal prefixes of class 16 **pa-*, 17 **kʊ-* or 18 **mʊ-* (Meeussen, 1967). The locative prefix is then used as an expletive subject, with or without locative reference. The non-agreeing locative markers *ku-* and *ha-* in the Zalamo example below suggests that the referential locative reading has vanished and the construction has been grammaticalized as a whole (cf. Bernander et al., 2020; Marten, 2013).

Zalamo:

(31). **Ku**-kal-a munhu **ha**-no
 SM17_{EXPL}-be-FV 1.person LOC16-DEM.PROX
 ‘There is a person here (in the house)’

If a construction encoding inversed locational predication is directly derived from a construction used for plain locational predication, then that construction is instead classified as a *general locational predication* (GLP) construction. “Direct derivation” could be in the form of any morphosyntactic feature that is generally applicable to predicative constructions, such as change in constituent order or definiteness marking (Creissels, 2019). Bernander et. al (2020), refer to GLPs as *non-dedicated existential constructions* as opposed to ILPs, that they refer to as *dedicated existential constructions*. Typically, in the literature, the terms (*negative*) *existentials* can include both the dedicated and the non-dedicated type. Swahili is a language that has both GLP and ILP constructions. The GLP is shown in (32), where example a) expresses the unmarked figure>ground perspective by means of the locative copula *-po* and agreeing subject marking from noun class 10, while example b) shows that the same copula and subject marking, is used for an inversed perspectivization, into ground>figure, the only

difference is a change in word order. The construction used in (33), on the other hand, is a ILP, or dedicated existential, construction with an expletive locative class 17 subject marker and the possessive copula *-na* (previously exemplified in predicative possession in example (24)b).

Swahili:

(32). a) Ndizi **zi-po** meza-ni
 10.banana SM10-LOC.COP16 9.table-LOC
 ‘The bananas are on the table’

b) **Zi-po** nchi amba-zo hu-tegeme-a kilimo.
 SM10-LOC.COP16 10.country REL-10 HAB-depend-FV 7.farming
 ‘There are countries which depend on agriculture.’ (Marten, 2013, p. 46)

(33). **Ku-na** njia n-yingine y-a ku-punguza bei z-a vitu
 SM17_{EXPL}-POSS.COP 9.way 9-other 9-AS INF-reduce 10.price 10-AS 8.thing
 ‘There is another way of reducing the prices of things’ (Marten, 2013, p. 46)

The different types of locational predicative functions are summarized in the table below. The functional differences between PLPs and ILPs has to do with perspectivization (column 2) and markedness (column 3).

Function	Perspectivization(s)	Markedness	Examples
Plain locational predication (PLP)	<i>Figure>Ground</i> (<i>FG>GR</i>)	Unmarked	<i>Zalamo:</i> Na-ukae SM1SG-14.home ‘I am at home’
Inversed locational predication (ILP)	<i>Ground>Figure</i> (<i>GR>FG</i>)	Marked	<i>Kutu:</i> Ha-na kinhu SM16 _{EXPL} -POSS.COP 7.thing ‘There is something’
General locational predication (GLP)	<i>Figure>Ground</i> <i>Ground>Figure</i>	Unmarked Marked	<i>Swahili:</i> Vitabu vi-po meza-ni 8.book SM8-LOC.COP16 9.table-LOC ‘The books are on the table’ Vi-po vitabu amba-vyo... SM8-LOC.COP16 8.book REL-8 ‘There are books which...’

Table 1: Types of locational predication

In his typology on ILP constructions, Creissels (2019) identifies seven possible *types*. Two out which are especially frequent in Bantu languages; the *there_be* type and the *be_with* type, also referred to as the *comitative* type (Bernander et al., 2020). The example from Zalamo in (31) is a *there_be* type, cross linguistically characterized by the obligatory presence of a locative expletive subject. The *be_with* is typologically rare, but common in Bantu, where it is referred to as *comitative* type because of the presence of the comitative marker *na*. Typically, these

comitative, or *be_with*, constructions are directly derived from possessive predicative constructions of the Comit-Possessive type by means of a locative expletive subject. This is illustrated in the examples from Kwere below, in which the *be_with* construction in (34)b is directly derived from example (34)a (repeated from (27)a):

Kwere:

(34). a) Ch-iza-kuw-a na ugali
SM1PL-FUT-be-FV COM 11.ugali
'We will have ugali' (lit. 'We will be with ugali')

b) **Kw**-iza-kuw-a na nyama, nguku, ng'hoo
SM17_{EXPL}-FUT-be-FV COM 9/10.meat 9/10.chicken 9/10.banana
'There will be meat, chicken, bananas' (lit. 'There will be with meat...')

Depending on the preferred analyses of the Swahili example in (33), the construction is somewhat ambiguous in terms of classification of a typological type. As pointed out in the discussion on predicative possession, the original comitative marker is reanalysable as a possessive copula. As pointed out by Bernander et. al (2020), if *na* is analysed as a possessive copula, rather than a comitative marker, it fits into the *have-ILP_type* in Creissels' (2019) typology, rather than the *be_with* type. The typologically more common *have-ILP* type is characterized by the figure being encoded like the possessee in possessive predication, with the subject position either being empty or, as in (33) being occupied by an expletive subject. The same construction is also found in Kutu, Kwere, and Zalamo, and is illustrated in the Kutu example in the table below. The table contains the different ILP-types found in Kutu, Kwere, and Zalamo. All three types are found in all three languages, but every type is exemplified once.

Typological ILP type	Example
have-ILP_type	<i>Kutu:</i> Ha-na kinhu SM16 _{EXPL} -POSS.COP 7.thing 'There is something' (lit. 'There has something')
be_with type (comitative type)	<i>Kwere:</i> Ku-kal-a na mbwanga SM17 _{EXPL} -be-FV COM 1.boy 'There was a boy' (lit. 'There was with boy')
there_be type	<i>Zalamo:</i> Ku-kal-a munhu... SM17 _{EXPL} -be-FV 1.person 'There is a person...'

Table 2: ILP-types in Kutu, Kwere, & Zalamo

3.2.2.1 *ILP and 'existentials'*

In much of the literature, constructions that are essentially expressing the perspectival view ground>figure, have been referred to as *existentials*, or *existential constructions* (cf. Bernander et al., 2020; Clark, 1978; Creissels, 2013; Croft, 1991; Francez, 2010; Freeze, 1992; Koch, 2012; Veselinova, 2013, 2014, 2015), which Creissels (2019) convincingly argues is not an accurate description. It is in fact rather misleading since the name suggests a semantic notion of existence, which these constructions do not necessarily, nor prototypically, encode, at least not in the sense of “something that is an element of the world”. Even in contexts where the ground is not overtly expressed, Francez (2010), argues that there is typically an anaphoric implicit argument that can be decided by context. For example, the negated ILP sentence ‘There is no coffee’, does not mean the same thing as ‘Coffee does not exist’, which Francez (2010, p. 13) illustrates with the different felicity judgements when the subordinate clause is added in the examples in (35) below.

- (35). a) There’s no coffee but we can go get some down the block.
 b) #Coffee doesn’t exist, but we can go get some down the street

Although example b) arguably encodes ‘existence’ in a way that a) does not, the literature on existentials generally classifies a) as an existential construction based on morphosyntactic properties, whereas b) would be considered a regular intransitive construction (cf. Veselinova, 2013). Authors like Veselinova, are clearly aware of this, but still opt for the ‘existential’ terminology. In her typological study of ‘negative existentials’, Veselinova (2013, p. 127) explicitly concludes that negative existentials “are used to make a statement about the absence of something, rather than negate its existence”.

At the same time, the relation between ILP constructions and the semantic notion of existence is not arbitrary. Especially for concrete entities, Creissels (2019) writes that ILP constructions may easily expand to encode ‘pure existence’ due to the semantic relationship, or inference, that if something is an element of the world, that something also exists somewhere in the world. However, this expansion is language specific, and the fact remains that in many languages ILP constructions are strictly used in its prototypical function of encoding a marked spatial relationship GR>FG, with no possibility of encoding bare existence.

The conceptualization and perspectivization of locational predication constructions in this paper, largely follows that of Creissels (2019). Consequently, most of the terminology is adapted from his work. However, even though the core feature of ILPs is considered to be the

inversed perspectivization rather than the possibility of encoding existence, the terms *existentials* or *existential construction*, including their negative counterparts *negative existentials* and *negative existential constructions*, sometimes appear throughout this thesis, because of its wide use in the literature. Not least referring to grammaticalization theories such as Croft's (1991) 'negative existential cycle'.

3.2.3 The semantic space of possession/location

The close relationship between possession and location/existence has been well studied and is mentioned in most works on possessives, 'existentials' and locatives (cf. Chappell & Creissels, 2019; Christie, 1970; Creissels, 2013, 2019, 2022; Heine, 1997; Koch, 1999, 2012; Lyons, 1967; Stassen, 2009, 2013; Veselinova, 2014, 2014, 2015). Not only can this relationship be motivated in semantic terms, but also in formal encoding in languages such as the overlap of the possessive copula *-na* also being used in locational predication, as discussed in the previous sections. This typological development is widely attested, and as stated by Stassen (2009, p. 722):

"have-encoding may in some languages 'encroach' upon the domain of existence encoding [inversed locational predication], in that an impersonal form of the have -verb may come to be used as the main predicative item in existential constructions. (...) the phenomenon occurs in a variety of genetically and areally unrelated languages"

Heine (1997, p. 202) draws from the works of previous linguists and philosophers and concludes that possessive, locative, and 'existential' constructions are related and they are all locative in their underlying structure. Similarly, Stassen (2009, p. 15) describes the two prototypical semantic components of possession as.

- a) "the possessor and the possessee are in some relatively enduring locational relation, and
- b) the possessor exerts control over the possessee (and is therefore typically human)."

According to Stassen (2009, pp. 15–17), these two components are valid for *alienable possession* i.e., possessive relations that are not seen as 'inherent' or 'indissoluble'. On the contrary, with *inalienable possession*, in which the possessee is typically seen as inseparable from the possessor, such as body parts or parts of an object¹⁵, the possessor does not exert control over the possessee. This explains why in languages like English, an inanimate possessor can occur in a prototypical possessive predication construction with an inalienable possessee

¹⁵ But also things like kinship roles, relational spatial concepts, and physical and mental states (cf. Heine 1997)

like ‘handles’ in (36)a, but not with an alienable possessor like ‘bananas’ in (36)b. In the same vein, Heine (1997, pp. 35, 39), categorises spatial proximity (other than the possessee being a concrete item) as the main feature of an inanimate possessor of inalienable possession. Consequently, it seems like the encoding of such constructions may require the spatial, or locational, component to be made salient in some languages, through the addition of some locative element, like the English example in (36)c.

- (36). a) The basket has handles
 b) #The basket has bananas
 c) The basket has bananas *in it*

Comparing the encoding of inalienable possession of an inanimate possessor to Swahili, it seems like the locational component is already very salient, as it requires no addition of a locative element, as opposed to the English translation:

- Swahili (Mohammed Zahran, p.c., 2023):*
 (37). Kikapu ki-na ndizi
 7.basket SM7-POSS.COP 9/10.banana
 ‘The basket has bananas (in it)’

Whether this holds for other Bantu languages including Kutu, Kwere, Zalamo, goes beyond the scope of the present study, but examples such as the negative possessive predication construction below, indicates that it could be the case:

- Kwere:*
 (38). vigelo v-i-kal-a v-a-bule ng'hoo
 8.basket SM8-PST-be-FV SM8-COP-NEG.POSS 9/10.banana
 ‘The baskets had no bananas (in them)’ (lit. Baskets they were they have no bananas’)

If location is indeed a more salient semantic feature of possession, it could be argued to increase the probability of possessive predicators expanding to locational ones. In other words, the precise development suggested for *-bule* and other similar items in chapter 5.

3.2.4 Negation of possessive and locational predication

In recent years, negative existentials (negation of inversed locational predication), have received some warranted attention (cf. Bernander et al., 2021 for Bantu; and Croft, 1991; Veselinova, 2013, 2014, 2015 more broadly), after much of the earlier typological work on negation had focused on SN or verbal negation. To the best of my knowledge there is, however, no substantial typological work available on the negation of predicative possession, even

though its close relationship to negative existentials has been highlighted in the above-mentioned works.

Croft's (1991) work establishes a cyclical diachronic development of standard negation and negation of existentials, referred to as the Negative Existential Cycle, by looking at synchronic data of negation marking. The diachronic development will be expanded on in section 3.3, but importantly, the synchronic data shows that the negation marking of inversed locational predication constructions often differ from that of SN. In Veselinova's (2013) sample of 95 languages, roughly one third have a different negation strategy in inversed locational predication compared to SN. In these languages there might be two completely different negators, or the same negator is used but with different morphosyntactic properties, including clause-type restrictions, or one negator being a free and the other one bounded. The use of different negation strategies is not exclusive to inversed locational predication but may vary also when it comes to plain locational predication. Creissels (2019, p. 15) writes that while some languages use standard negation markers for one or both, other languages have alternative strategies, like suppletion, both in negative plain locational predication (NPLP) and negative inversed locational predication (NILP) constructions.

Veselinova (2013) also shows that 'negative existentials', i.e., predicators used in NILP, frequently occur in a wide range of different functions. The most frequent function is negative possessive predication, followed by negative plain locational predication. It is interesting to note that these functional overlaps strongly correspond to the overlaps found in the affirmative, i.e., the semantic proximity of 'have/exist', and the same predicator possibly being used for both plain and inversed locational predication. In alignment with the terminology used for affirmative constructions encoding both unmarked (FG>GR) and marked perspectivizations (GR>FG), I will refer to the negative predicators as *negative general locational predicators* (NGLPs).

3.2.4.1 *Negation of possessive and locational predication in Bantu*

In Bantu languages, standard negation of affirmative predicative constructions are commonplace according to Bernander et al., (2021, p. 9). As exemplified by the Swahili examples below, the standard negation prefix *ha-* (39) is used also for the negation of possessive predication (40), as well as inversed (41) and plain locational predication (42). Also note the overlap of the copula used for the possessive and the inversed locational predications, which both use the originally comitative marker *na*, again, highlighting the interrelatedness between possession and space:

Swahili G42 (own knowledge):

- (39). **Ha**-tu-ta-kuja-a
 NEG-SM1PL-FUT-come-FV
 ‘We will not come’
- (40). Juma **ha**-na gari
 Juma NEG.SM1-POSS.COP 5.car
 ‘Juma does not have car’
- (41). **Ha**-ku-na simu meza-ni
 NEG-SM17_{EXPL}-POSS.COP 9.phone 9.table-LOC
 ‘There is no phone on the table’
- (42). Mama **ha**-yu-po nyumbani
 1.Mother NEG-SM1-LOC16 9.home
 ‘Mother is not at home’

Another common construction for negative existentials in Bantu, highly relevant for the case of *bule*, is the combination of a negative lexeme and a locative prefix. The source lexeme can be of different etymologies and part of speech categories. According to the study of Bernander et al., (2021, pp. 12–13), two of the most common ones are verbs that mean ‘be without, lack’ or adjective/adverbs meaning ‘empty, only, in vain’. Both these etymologies are common not least in Tanzanian Bantu languages. Bernander et al (2021, p. 13) list 6 Tanzanian languages which use a reflex of the adjectival stem, reconstructed in Proto Bantu to **-tópó* ‘only, empty, in vain’. This item is also found in both inversed and plain locational predication in Zalamo and Kutu. In Kutu, it is also used for negative predicative possession. The item *-duhu* will be discussed in detail in chapter 5:

Kutu:

- (43). a) **Ku-duhu** somba ku-luvu
 SM17_{EXPL}-NEG.LOC.COP 9.fish LOC17-11.river
 ‘There is no fish in the river’
- b) nyabo wa-ku-**duhu** m-dibiki, wa-hasi
 10.monkey SM2-LOC17-NEG.LOC.COP LOC18-5.tree, SM2-ground
 ‘The monkeys are not in the tree, they are on the ground’
- c) mweye m-**duhu** ngombe
 PRO2PL SM2PL-NEG.POSS.COP 9/10.cow
 ‘You (pl) do not have cows’

Zalamo:

- (44). a) **Ha-duhu** mandia ku-jiko
 SM16_{EXPL}-NEG-LOC.COP 6.food LOC17-5.kitchen
 ‘There is no food in the kitchen’

b) na-ha-**duhu** ha-kae
 SM1SG-LOC16-NEG.LOC.COP LOC16-9.home
 ‘I am not at home’

For items derived from negative verbs Bernander et al., (2021) list for example *-hela*¹⁶ for Ndamba and Pogolo, and **-búd-* ‘lack; be lacking; be lost’, found in Kinga and Bende:

Kinga (G67) (Bernander et al., 2021, p. 18)
 (45). KU-vul-a soda
 SM17_{EXPL}-lack-FV 9.soda
 ‘There is no soda’

3.3 Diachrony of negation

In the literature on negation a wide range of source items are mentioned. Items from different part of speech and with very different semantic properties may develop into negation markers. Some of the most common items include negative verbs such as ‘fail’, ‘lack’, ‘lose’, ‘miss’ (Heine & Kuteva, 2002, pp. 146, 188) and other words with some inherently negative semantic property such as ‘nowhere’, ‘nobody’, and ‘never’ (Devos & van der Auwera, 2013, p. 233). Negation markers that are derived from source items that are not inherently negative often emerge with emphatic connotations. Such examples include minimisers, that are often (at least initially) used emphatically, like the French , *goutte* ‘drop’, or *pas* ‘step’, which can be thought of as ‘even a step’, or the English ‘anything’ (paraphrasable as ‘even one thing’) (Devos & van der Auwera, 2013, p. 232; van der Auwera, 2010, p. 96). Less commonly mentioned, but seemingly rather widespread, including in Bantu, are locative and possessive pronouns. Finally, partitive, inchoative, and completive markers are also listed as potential source items of negators (Devos & van der Auwera, 2013, p. 233).

A marker of negation used in one particular negative function may also expand or develop new functions within the domain of negation. Markers of negative existence can develop into plain negation markers, or interjections (‘no’) (Croft, 1991; Heine & Kuteva, 2002, p. 217; Veselinova, 2013, 2014); and older negation markers may be “recycled” and start to be used together with a newer one, often for emphatic purposes (Devos & van der Auwera, 2013, p. 233). Similarly, negation markers starting out as emphasisers may have their emphatic connotations bleached over time and either develop from an emphasiser into a standard negation marker, or alternatively be disappear and be replaced by a newer item with stronger emphatic connotations. Negation is a category that has been proven to be very prone to renewal. Studies

¹⁶ This item will be discussed in chapter 5, where a pathway of change, similar to *bule*, is proposed.

negative existential predicate may compete with each other and be used, at least somewhat, in complementary distribution; or the strategies may be regularly restricted to different functional categories like certain temporal or aspectual domains. If, on the other hand, the negators are combined, the negative existential predicate is used to reinforce the negation expressed by “the presumably older regular verbal negator” (Croft, 1991, p. 10). In languages of type C~A, the combined negative existential and verbal negator is starting to be re-analyzed exclusively as a verbal negation marker. The loss of negative existential reading is evidenced by the marker starting to (occasionally) combine with a positive existential predicate to form the negative existential.

Furthermore, the functions encoded by ‘negative existentials’ frequently cover a wide range of functions, most importantly negative predicative possession, negative plain locational predication, tense marking, negative interjections, negative pro-sentences, and/or negative quantifiers/indefinite pronouns (cf. Croft, 1991; Veselinova, 2013, 2014) (and for Bantu, Bernander et al., 2021).

3.3.2 Jespersen cycles

The Jespersen cycle(s), is a term coined by Dahl (1979), after the work of Otto Jespersen (1917). It refers to well attested processes of cyclical change of negation markers which is a very well-studied phenomenon. While acknowledging the early works of Jespersen (1917) and Meillet (1926), the definition of the cycles adopted here are drawn from further advancements made to this theoretical framework, especially by van der Auwera (2009) and by Devos and van der Auwera (2013) who furthered the understanding of this type of cyclical change by investigating Jespersen Cycles in Bantu.

The basic premise of the Jespersen Cycles is that an additional and initially optional negation marker is added to a negative construction in order to reinforce the negation. The most famous example is the French *ne...pas* construction in which the original negative marker *ne* is reinforced by the addition of the minimiser *pas* ‘step’ (‘not even a step’). Over time, this second marker may become an obligatory part of negation, in what can be referred to as the doubling stage where standard negation is expressed by two markers. Finally, in a third step, the innovated marker ends up replacing the initial negation marker as the sole component of negation. This type of cyclical change is described by Meillet (1926, pp. 139–140) in the following way:

Languages follow a kind of spiral development: they add incidental words to obtain an intense expression: these words weaken, degrade, and fall to the level of mere grammatical tools; new or different words are added for the purpose of the expression; the weakening begins again and so on without end.

The weakening or bleaching of the emphatic connotations of the second negative marker may lead to different results, and the substitution of the initial negative marker cannot be taken for granted (van der Auwera, 2009). The languages under study are a case in point. In the East Ruvu languages, post verbal negative emphasizees are attested and as will be shown in section 5.3, some of them have also become weakened or bleached. While there might be instances of doubling stages where the post-verbal marker is regularly (although not mandatorily) used without any emphatic connotations, these particles are never the sole component of standard negation. Rather, when the emphatic connotations have been bleached, they seem to be directly replaced by a new similar element. All the while, the initial negation marker remains intact (cf. for similar patterns Devos & van der Auwera, 2013)

However, as mentioned in section 3.1.3, Bernander et al., (2022) show that there is a cluster of languages in Tanzania, not far from the East Ruvu languages, in which post verbal emphasizees constitute the only components of standard negation. Since many of these languages have multiple markers available, with some having more emphatic connotations, it seems likely that bleaching and innovation is re-occurring in typical Jespersen cyclical fashion.

4 Method

Previously published material and collected data are taken into account as much as possible in answering the set-out research question. However, as mentioned in the introductory chapter, the descriptive status of the languages under study together with the hypothesized discourse pragmatic functions of *bule*, made collecting additional data a requirement for the purpose of the study. It is widely accepted that language data is preferably collected in its ‘natural environment’, i.e., the geographical places and social environments where it is usually spoken (cf. Bower, 2015). Hence, a fieldtrip to Tanzania was conducted for a period of approximately two months during February, March, and early April of 2023. This chapter provides an account of the methods for collecting, storing, and processing data.

4.1 Language selection

While it would be of great interest to investigate negation strategies, negative particles, and the potential occurrence of *bule* in at least all the languages of the Luguru-East Ruvu group, the

limited resources and time spent in the field for this project warrants a more limited selection. Consequently, the choice was made to include those Ruvu languages in which *bule* has been attested in recent field data collections, leaving out only Kami due to the very low number of speakers and the resulting difficulties of finding consultants.¹⁷ With more time and resources it would be interesting both to include Luguru, but also to extend from the Luguru-East Ruvu group and look at the Seuta group, other coastal languages like Zigua and Giryama, in which *bule* has been previously attested. Nguu is also a strong candidate for the potential use of *bule* in different functions, it is very close to Zigua and it is also subject to other contact induced innovations from the greater Ruvu languages, (cf. Zahran, 2022). Other interesting languages to look at would be Vidunda, Ndamba, Pogolo, and Mbunga spoken further south.

4.2 Consultants

Throughout this thesis, the term *consultant* is used to refer to a person I worked with in the field and who is a speaker of a target language. Every consultant is a native speaker of either Kutu, Kwere, or Zalamo and they all provided me with language data on their respective native language. The term ‘consultant’ is thought to best describe the nature of the working relationship in which I, a non-speaker of these languages, have to consult an expert in order to attain the specialized information needed for linguistic analysis (cf. Bower, 2015, p. 10).

4.2.1 Informed consent

All participants are thoroughly informed about the intentions of the researcher and their rights as participants. Individual protection comes first, and the consultants were informed about their right to cancel their participation at any time and to ask the researcher to delete all material. They were also asked to provide written consent for their participation.

4.2.2 Sampling

Since all the languages under study are endangered, finding consultants can be somewhat of a challenge. The predominance of Swahili in most domains also means that although a person might identify as being part of a speaker community, their language competence may vary. For this reason, I used availability sampling, in which I relied on the consultants who were willing to participate and who were available to me through contacts. These consultants have been recommended to me based on their participation in previous linguistic fieldwork. In addition to

¹⁷ This issue is brought up by Petzell and Aunio (2019, p. 563), who report that the number of Kami speakers is significantly lower than the 5,518 speakers reported by LoT (2009). Kami is spoken only by elders and is unfortunately on the verge of extinction.

the availability sampling, snowball sampling was used, in which the consultants referred me to other people in the speaker communities that were willing and able to take on the role of consultant. The appropriateness of a suggested consultant is evaluated based on them being considered a good speaker by other members of the community. Additionally, their performance of some simple initial task, like providing some basic vocabulary, is evaluated by the researcher. Back translations and acceptability judgments of the data provided by different consultants can also be helpful to determine linguistic competence, although it is not always easy to discern what is variation and what is limited proficiency.

4.2.3 Metadata

When conducting interviews and collecting language data, relevant metadata is also gathered about the linguistic consultants. Information about factors that might determine language use and be of relevance for analyzing potential variation is important both for the quality of the present study and for any future work with the data, by myself or by other researchers. This includes social variables, like age, gender, occupation, social status, etc. Information about their linguistic environments like; where they live and how long they have lived there; what languages they are in contact with in their everyday life; and what languages are spoken in their home, at work, and with their close friends and family. Linguistic background is also highly relevant, i.e., what language they spoke growing up, and whether both their parents and/or their caretakers were speakers of the same language.

4.2.4 Data storage and anonymization

The language data is stored in Excel, separately both from the speaker metadata and the names of the consultants, in accordance with GDPR.

4.3 Data collection

Data was collected through speaker interviews in the areas where the languages are spoken. For cross-linguistic comparability and to obtain relevant data, collection mainly relied on elicitation. The following section motivates translational and non-translational elicitation as the main strategies for data collection and outlines the different strategies that are applied to ensure the collection of appropriate and qualitative data.

4.3.1 Translational elicitation

As a first step, the linguistic consultants were asked to translate sentences from Swahili into their respective native languages. Translation elicitation can be very useful to collect the desired data, especially when appropriate measures are taken to ensure the quality. Two particularly

important aspects, according to Cover (2015) is to consider the dialogue with the consultant *about* the elicited material as an integral part of the elicitation process; and to pay close attention to discourse context. The latter means that for all sentences, an appropriate context for its use needs to be established. A sentence may be elicited with a ‘frame’ that ensures the right interpretation. Whenever the grammaticality of a sentence is established, it also needs to be established in what contexts the sentence can be used and if the different contexts affect its meaning. In the same vein, Bloom Ström and Petzell (to appear, p. 16), write that “even brief two-sentence dialogues can make a difference” in obtaining more authentic and pragmatically appropriate data. They point out that expressions with specific discourse pragmatic functions are very unlikely to occur outside the appropriate discourse context. Therefore, in order to obtain a form encoding such a discourse function, the suitable discourse context must be created. Testing in which contexts an expression is felicitous is also key to understanding the linguistic limits and boundaries of said expression. Obtaining evidence from when and how a linguistic expression *cannot* be used requires elicitation and is, according to (Matthewson, 2004), sometimes as important as knowing when it *can* be used.

In a secondary stage of the elicitation, the language data is assessed and evaluated through additional speaker interviews. Some sentences provided by one consultant are given to another consultant who is asked to interpret them, do back translations, and evaluate the sentences in terms of grammaticality and acceptability in different discourse contexts. Of course, not disregarding the intuitions of the first speaker. This approach is very helpful both to establish the accuracy and grammaticality of the existing data, as transcribed by the researcher; but also to capture additional meanings and to get insights into the fine grained contextual, semantic, and grammatical variables that determines the felicity of a given expression. As Cover (2015, p. 250) points out, when the consultant is the one who provides felicitous contexts for an expression, it can provide insights into what semantic features of the construction that are most salient, which is particularly useful when dealing with such a polyfunctional linguistic item like *bule*. Additionally, in order to complement the documented data, sentences constructed by the researcher are evaluated by the consultants, so called acceptability judgements, – which serve to disambiguate data and further investigate contextual, grammatical, and semantic possibilities and restraints. Here, conversational style interviews, in which two consultants are asked to discuss and evaluate a construction together, were also of great use. Overall, this comprehensive approach to elicitation is, in the words of Cover (2015, p. 247), the only strategy that directly investigates infelicity of a construction by exploring its semantic limits and testing minimal

grammatical and contextual variations. In doing so, it is possible to define the conditions for the felicity of an expression and its boundaries. Since the use of *bule* is, at least in some functions, strongly linked to discursive and pragmatic factors such as reinforcing negation, the targeted elicitation approach is very suitable for this topic. Based on early findings, additional elicitation frames are constructed in which the use of *bule* can be postulated.

While this type of data collection aims to create “natural-like” scenarios, it cannot be equated to naturalistic spoken language. The most accurate way of describing how *bule* is used in everyday language use, would of course be to analyse the occurrence in actual conversations. Unfortunately, the amount of data required to conduct such research is not available for Kutu, Kwere, and Zalamo, and collecting and compiling it would exceed the time available for the present thesis. When looking at one specific item in the language, the targeted elicitation approach provides the best chances of collecting a desirable amount of relevant data. The elicitation aims to include all potential uses of *bule*, including adjectival/adverbial meanings and previously non-attested usages that can be hypothesized based on attested expansions and/or grammaticalization paths of similar linguistic elements cross-linguistically, particularly in other Bantu languages.

In elicitation, the consultants are first asked to give the answers they feel are the most natural, after which follow up questions, like “Can this be expressed any other way?” or even more explicit “Would it be possible to use *bule* here?” may be asked to investigate any potential uses. Both individual sentences with frames and some short stories designed to prompt different potential uses of *bule*, are elicited.

Furthermore, Cover (2015, p. 246) also writes that elicitation is the only method that guarantees paradigmatic data, which together with the comprehensiveness of data, is needed in order to draw reliable semantic conclusions

4.3.2 Non-translational elicitation

For more naturalistic data, some open-ended stories were used as a complementary method. This method can be considered a semi-structured task in which the content is guided by the researcher, but the output is decided by the consultant. Semi-structured tasks are, according to Bower (2015, p. 131), very useful for allowing speakers some freedom while also being able to establish some boundaries for the utterances. This is practical for limiting biases that can be created in translational elicitation. The open endings of the stories do not guarantee a single use of *bule* but might still provide valuable complementary data.

As pointed out by Bloom Ström and Petzell (to appear, pp. 12–13), the dominance of Swahili in Tanzania poses a challenge when conducting translation elicitation in the East Ruvu languages, since data from the target language might become biased towards the construction given in Swahili. Besides semi-structured tasks, other elicitation strategies and different stimuli may also be used to limit such effects. Bloom Ström & Petzell (to appear), write that transformational elicitation proved to be very useful in the study of microvariation in the Greater Ruvu languages. Transformational elicitation means that the consultant is instructed to transform one construction into another, that is of particular interest for the research scope. For the present study, a relevant example would be a possessive construction that is asked to be transformed into its negative counterpart to see whether or not *bule* is given in that context. This transformation can be elicited by asking questions like “what would you say if it wasn’t true?” (Mosel, 2011, p. 84); or, alternatively, it can be done by the help of physical stimuli which is altered to prompt a desired construction. Such examples include removing an object from the shared visible space or showing pictures of a person or object with-, and then without, something. Other elicitation stimuli include making an obviously false statement about a picture to get the consultant to emphatically negate it.

5 Pathway of *bule*: Where did it come from, where did it go?

This section describes the functions and instantiations of *bule* in the different languages. It is shown that *bule* is highly polyfunctional and that its distributions vary in the different languages. It can either be free-standing or occur with inflectional morphology. As a free-standing element the identified functions of *bule* are:

1. Adverb
2. Post-verbal negative emphasiser
3. Negative interjection/answer particle ‘no’

With inflectional morphology, the functions are:

4. Negative possessive predication
5. Negative inversed locational predication
 - a. Negative interjection/answer particle ‘no’
6. Negative plain locational predication

Furthermore, the order in which these functions are listed above, roughly represents the hypothesized pathway of change. Evidence is presented for the functional expansion from 1 to

3, represented in (i) and from 4 to 6, represented in (ii). Function 5 has also in one case parallelly developed into 5a, illustrated in (iii):

(i) *adverb* > *negative emphasiser* > *negative interjection*

(ii) *negative possessive predication* > *negative inversed locational predication* >
negative plain locational predication

(iii) *negative inversed locational predication* > *negative interjection*

The development from free-standing to inflected item is hypothesized to have occurred directly from function 1 to 4, represented in (iv).¹⁸

(iv) *adverb* > *negative possessive predication*

Moreover, analysing patterns of microvariation and strategies used to encode these functions in neighbouring languages, it is shown that this development is not limited to *bule*. Comparing data from the languages under study and from other East Bantu languages, two different items, *hela/hera* and *-duhu/topo* are identified with possessing a nearly identical range of polyfunctionality as *bule*. This is seen as evidence that all these functions are conceptualised as part of a close-knit semantic relationship.

The items *bule*, *hela/hera*, and *-duhu/topo* also exhibit very similar morphosyntactic features in the different functions and it is therefore hypothesised that the proposed development of *bule* is in fact part of a type of areal cyclical change. Inspired by grammaticalization works like (Heine et al., 1991; Heine & Reh, 1984), it is demonstrated that these very similar source items are adopted onto a reoccurring and predictable grammaticalization path.

The following sections will describe the different strategies used to encode the functions listed above in Kutu, Kwere, and Zalamo. The outline roughly follows the proposed chronological development of *bule* starting with the etymology in 5.1, followed by the initial developments of *bule* as a free standing element in 5.2 and 5.3. Section 5.4 deals with the predicative, inflected uses of *-bule*, and proposes the development path in (ii) as a part of a cyclical change pattern. Section 5.5 draws from crosslinguistic comparative data to 1) highlight the semantic affinity between the different adverbial senses, and to establish their overlap with negative emphasisers as an areal feature; and 2) establish the recursive cycle suggested in 5.4 as an areal feature. Finally, the results and discussions of chapter 5 are summed up in section 5.6.

¹⁸ Although it is noted in sections 5.3 and 5.5.1 that negative adverbs and negative emphasisers are not always easily discernible and there is considerable functional overlap

5.1 Origin of *bule*

According to Johnson (1939, p. 42) *bure* in Swahili is an originally Arabic or Hindi loan, *bure* (بُرِّعَ) /barʕa/, ‘bestow of free will’ or ‘worthless’. Ashton (1947, p. 176), Lodhi (2000, p. 108) and TUKI (2001) all list *bure* as an adverb of Arabic origin with the meanings ‘free’ (of charge), ‘in vain’/‘for no good cause or result’, ‘freely’, ‘to no purpose’. Due to several decades of Arabic presence along the Swahili coast, a large portion of the Swahili vocabulary can be traced back to Arabic roots. Swahili being the dominating lingua franca in large parts of East Africa has then resulted in many of these words spreading via Swahili into other languages spoken in the area (Lodhi, 2000). According to Sacleux (1939, p. 120), *bure* or *bule* is one such example that has spread to many Tanzanian languages, including Kutu, Kwere, and Zalamo. Two adverbial functions of *bure* in standard Swahili are illustrated in the examples below:

Swahili G42, (Hurskainen, 2016):

(47). Signal ya Star TV i-na-pat-ik-an-a **bure** mji-ni Mwanza na Arusha tu
Signal of Star TV SM9-PRS-get-NT-AS-FV **BURE** city-LOC Mwanza COM Arusha only
‘Star TV is available **for free** only in Mwanza and Arusha’

(48). Wa-li-ku-w-a wa-ki-m-pig-a **bure?**
SM2-PST-INF-be-FV SM2-COND-OM1-beat-FV **BURE**
‘Were they beating him **for nothing/in vain?**’

In Copperbelt Swahili or Kingwana, a Congolese Swahili variety, Sacleux (1939, p. 120) writes that *bule* often has a depreciative notion in constructions like *kazi bure* ‘work badly done/wasted’, whereas constructions with the associative *-a* followed by *bule* marks gratuitousness or abundance, as in *kazi ya bure* ‘work at will, as much as one can desire’; or *chakula cha bure* ‘as much food as you want’. This distinction is not attested in standard Swahili. Although *bure* can sometimes be preceded by an associative *-a* in standard Swahili, there is no apparent change in meaning:

Swahili (Mohammed Zahran, p.c., 2023):

(49). Ku-na chakula (**ch-a**) **bure**
SM17-POSS.COP 7.food (**7-AS**) **free**
‘There is free food’

The alternation here between *bure* and *bule* is due to a phonological trait common to several eastern Bantu languages in which the liquid consonants /r/ and /l/ are at least partially in free variation. The most common realization in several of these languages seem to be that of a lateral proximant [l], whereas rhotic consonants or ‘r-sounds’ like alveolar flaps [ɾ] or trills [r̄] are rarer. Several languages have been described as not having rhotic consonants in their phoneme inventory whatsoever. The preference for [l] is the case in many languages throughout Tanzania

(and beyond), including several Ruvu languages like Kami G36 (Petzell & Aunio, 2019, p. 565), Luguru G35 (Mkude, 1974, p. 42), and Gogo G11 (Cordell, 1941, p. 4). Meinhof (1907, p. 111) does not list /r/ as part of the consonant inventory in Zalamo but writes that it can sometimes be heard instead of /l/. Gonzales (2002, p. 207), writes that proto Bantu /l/ can, in some environments, be pronounced either /l/ or /r/ in Doe, Kami, Kwere, and Zalamo, but not in Kutu where it is always /l/. Naturally, speakers of languages that prefer the use of [l] over any ‘r-sound’ may carry over this trait into Swahili. Thus, while written *bure* in the standard orthography, it may also be realized as *bule* by many Swahili speakers. In Kutu, Kwere, and Zalamo, it is mostly or always realized as *bule* and is consequently written as such throughout this thesis.

5.2 The innovation begins: from adverb to negation

In all three languages under study, *bule* is still used in its original adverbial functions ‘free’, ‘in vain’, and ‘for no reason’ as shown in examples (50), (51), and (52):

Kutu:

- (50). N-gwelel-igw-a **bule**
 SM1SG.PST-give-PASS-FV **for.free**
 ‘I got (them) for free’

Kwere:

- (51). ona n-i-hit-a, mbali d-i-kal-a d-i-hind-igwa, n-i-hit-a
 yes SM1SG-PST-go-FV but SM5-PST-be-FV SM5-PST-close-PASS-FV SM1SG-PST-go-FV
bule
in.vain
 ‘Yes, I went, but it (the store) was closed, I went in vain’

Zalamo:

- (52). Pole Juma n-i-m-komok-el-a **bule**
 poor Juma SM1SG-PST-OM1-scold-APPL-FV **for.no.reason**
 ‘Poor Juma, I scolded him for no reason’

At some point, *bule* then expanded from its adverbial sense and adopted the function of a negative marker. As a free-standing element without any inflectional morphology, *bule* occurs as a negative marker in two different functions. In Kutu and Kwere, as a postverbal negative emphatic particle, and in Kutu and Zalamo as an interjection/answer particle meaning ‘no’. Both functions are illustrated in example (53)b from Kutu:

Kutu:

- (53). a) Mayo ku-som-a?
 Yesterday SM2SG.PST-read-FV
 ‘Did you read yesterday?’

- b) **Bule**, si-som-ile **bule**
no SM1SG-read-PST NEG.EMPH
 ‘No, I didn’t read at all’

From a diachronic perspective, it seems most likely that the postverbal emphatic function came first, followed by a functional expansion into a negative interjection. The pathway of change is illustrated as follows:

adverb > post-verbal emphasiser > negative interjection

This development path is motivated through morphosyntactic features, microvariation, diachronic data, and semantic overlap. Morpho-syntactically, the adverbial and the emphatic uses of *bule* are formally identical, i.e., they have the same morphosyntactic properties of being postverbal and not taking any inflection, contrary to other innovations that differ in their morphosyntactic properties. The negative interjection, on the other hand, is preverbal, and in the case of Kwere, it is also inflected. In Kwere, the most frequently used negative interjection for ‘no’ is unquestionably *aka*¹⁹ (54), which is also found in Luguru (Mkude, 1974), and in Kutu, where it alternates with *bule*. On the odd occurrence in my data, the Kwere speakers use *habule* as interjection (55). The latter is analysed as the locative marker *ha-* being prefixed to *bule*, which suggests another development path than for the interjection *bule* without any inflectional morphology, as found in Kutu and Zalamo (56). As will be shown in 5.4.2, *habule* is used in negative inversed locational predication, or as a ‘negative existential’, in Kwere. Following Veselinova (2013), negative existentials constitute a common source category for negative interjections.

Kwere:

- (54). **Aka**, ha-kimb-ile himahima **bule**
 INTRJ NEG.SM1-run-PST quickly NEG.EMPH
 ‘No, s/he wasn’t running fast’

- (55). **Habule**, si-na-hit-a
 INTRJ NEG.SM1SG-NEG.PRF²⁰-go-FV
 ‘No, I haven’t gone (yet)’

Zalamo:

- (56). **Bule**, n-i-lek-a ku-tend-a sang'hano
 INTRJ SM1SG-PST-stop-FV INF-do-FV 9.work
 ‘No, I stopped working (there)’

¹⁹ Possibly a cognate to the Swahili verb and interjection *acha* ‘stop, leave, let, permit’ etc. (TUKI, 2001), with a suggested reconstruction to the Proto Bantu verb **-dáca* ‘shoot, throw, throw away’ (Bastin et al., 2002)

²⁰ The TAM system has not yet been thoroughly analysed. The morpheme *-na* seem to roughly correspond to the Swahili marker *ja-*, but the glossing here is to be considered tentative.

When it comes to diachronic data, the material is of course limited, but the two grammar sketches of Zalamo, dating back over a century (Meinhof, 1907; Worms, 1897), both mention the postverbal function rather than the interjection (although cf. Johnston, 1919, p. 151 who mentions it as an interjection some years later). Sacleux (1939, p. 120) mentions *bule* as a negative marker in Nyika (E72) and Zigua although it is unclear in what function.²¹

Microvariational data shows that while *bule* as a post verbal negative particle, at least at some point, has been attested in all three languages under study. The development into an interjection, however, seems specific to Kutu and Zalamo which suggests that this functional expansion occurred later. The subsequent development could possibly be a result of the reduced emphatic force of *bule* in Kutu and Zalamo, which will be established in 5.3.

Seemingly the strongest arguments for a reversed pathway (*negative interjection* > *negative post-verbal emphasiser*) would be from cross-linguistic tendencies. Even if some borrowability hierarchy models such as Haugen (1950, p. 224), claim that interjections are unlikely to be borrowed, Appel and Muysken (1987, p. 172) convincingly present evidence that both interjections and adverbs are among the mostly easily borrowed linguistic items, in fact more so than negation markers. Furthermore, negative interjections are often mentioned in the literature on Jespersen cycles as a source item for post-verbal emphasisers (cf. Devos & van der Auwera, 2013). Be that as it may, developments must of course be explained by looking at the specific evidence from each case rather than assuming what is crosslinguistically common. Besides, there other cross-linguistic patterns that could be used to support the case that I am arguing here, for example that negative emphasisers, not least in Bantu, are prone to spread between languages (cf. Bernander et al., 2022, p. 92; Nurse, 2008, pp. 57, 108).

In terms of semantics, the development from adverbials ‘for free’ into negative markers is not mentioned in prominent literature. To the best of my knowledge, this functional overlap found in a small cluster of languages in Tanzania is rather exceptional. The cluster includes the languages under study, Kami (G36) (Petzell & Aunio, 2019), and Langi (F33), spoken north-west of the Ruvu languages in Tanzania, that has the adverb/negative marker *bwεεε* ‘for free/not’ (Dunham, 2005, p. 205). The semantic relationship between negation marking and these adverbs are most likely related to their other notions of ‘in vain, for nothing’.

²¹ In the translations of the New Testament in Zigua and closely related Nguu, both the functions ‘in vain’ and ‘no’ are found (The New Testament in Nguu, 2014; The New Testament in Zigua, 2014, Matthew 5:37, 15:9). Although the occurrence of a negative emphasiser in a language can of course not be excluded based on its absence in the Bible.

Consequently, Devos & van der Auwera (2013, p. 234) and Bernander et al., (2022, p. 31) opt to place *bule* and *bwæɛtɛ* in a source category of postverbal negative markers labelled ‘negative words’, typologically similar to notions such as ‘empty’ or ‘only’. Although the development from ‘empty’ or ‘only’ might be typologically quite rare, it is well-attested as a common source item for negative particles in Bantu, not least in Tanzania (Bernander et al., 2021; Devos & van der Auwera, 2013). Some other items used both for negation marking and at least one of these adverbial senses include reflexes of **-tópú* ‘only, empty, in vain’, and the items *(m)bae/bai* and *hela/hera* discussed in chapter 5.5.1.

5.3 Postverbal emphatic negation

Recent data shows that *bule* is frequently used as a post-verbal negative emphasiser in both Kutu, Kwere, and also Kami, but seemingly not in Zalamo, for which it had been reported previously. Based on both the functional distribution of *bule* and other emphasisers presented below, it is hypothesized that *bule*, to different extents, has ended up losing some of its emphatic force. It is argued that the negative emphatic force of *bule* is strong in Kwere, slightly bleached in Kutu, and in Zalamo possibly weakened to the extent of disappearing in an emphatic function all together.

Meinhof (1907, p. 105), Worms (1897), and Johnston (1939, p. 776) also mention *bule* as a postverbal negative particle in Zalamo. The first mentioned author, writes that the main negation strategy is a negative prefix, but that *bule* “is much added”. While the optionality of *bule*, in line with the Jespersen’s cycles, could indicate that it emerged as an emphasiser; none of the authors explicitly mention anything about emphasis. A possible explanation could be that any emphatic connotations had already started to bleach at the time. All three authors list *bule*, but also *bae* as post-verbal particles. Furthermore, Johnston (1919, p. 776), besides Zalamo, also mentions ‘-*bule*’ as a negative particle in Kami, Kutu and Luguru. However, the more recent work on Luguru by Mkude (1974) discusses negative particles to some length, with no mention of *bule*. The use of *bule* and *bae* as negative particles in the old Zalamo sources is illustrated below:

Zalamo, (Worms, 1897, p. 305)²²
 (57). si-j-a **bule/bae**
 NEG.SM1SG-eat-FV NEG/NEG
 ‘I don’t eat’

²² Glossing is added

In Kutu, Kwere, and Kami *bule* is an emphasiser. In Kwere, *bule* regularly alternates with a mutually exclusive postverbal negative emphasiser *mbé*, with no functional distinction perceived by the speakers nor identified by the researcher. Comparing examples (59) (repeated from (1)) and (60) from Kwere, we can see that when the verb *-g'ha* ‘to give’ is in the affirmative, *bule* is interpreted in its adverbial sense, whereas when the same verb is negated, *bule* becomes a negative emphasiser.

Kutu:

- (58). mayo si-som-ile **bule**
 yesterday NEG.SM1SG-read-PST NEG.EMPH
 ‘Yesterday, I didn’t read at all!’

Kwere:

- (59). Ka-ni-g'h-a **bule**
 SM1.PST-OM1SG-give-FV **for.free**
 ‘S/he gave (them) to me for free’
- (60). **Ha**-ni-g'h-ile **bule/mbé**
 NEG.SM1-OM1SG-give-PST NEG.EMPH
 ‘S/he did not give (them) to me at all’
 #S/he didn’t give (them) to me for free’

Kami, (Malin Petzell, p.c., 2023)

- (61). si-lond-a **bule**
 NEG.SM1SG-like-FV NEG
 ‘I don’t like (it) at all’

On the other hand, in present day Zalamo, my main informant immediately and completely rejected all uses of *bule* in this function and did not recognise *bae* as a Zalamo word whatsoever. When *bule* was used post-verbally after a negated verb, he interpreted it in its adverbial sense rather than as an emphatic negator:

Zalamo:

- (62). Si-m-tow-ile **bule**
 NEG.SM1SG-OM1-hit-PST **for.no.reason**
 ‘I did not beat him for no reason’ (i.e., I beat him and I had my reasons).

Another consultant did not produce any of *bule* or *bae* himself, but he did accept both of them as postverbal emphasisers when they were added to sentences that he himself produced with standard negation, as shown in (63) and (64). At the very least, it can be said that the particles do not seem to be frequent in Zalamo, if they are indeed used at all. If the differences in acceptability depend on language internal variation, any determining factor remains unclear, especially considering that both consultants were middle aged men from Kisarawe, both raised by two Zalamo parents.

Zalamo:

- (63). Si-m-tow-ile (bae)
 NEG.SM1SG-OM1-hit-PST (NEG.EMPH)
 'I didn't hit him/her (at all)'
- (64). nie si mtwanzi (bule), nie na-mdigalo
 PRO1SG NEG.COP 1.woman (NEG.EMPH) PRO1SG SM1SG-1.man
 'I am not a woman (at all), I am a man'

Although its relation to *bae* is somewhat tentative, one trace of it in modern Zalamo could be the item *ambabae* or *amba bae*, which is used as an interjection to express a sentiment of surprise. In (65) it is used to express surprise towards the absence of leaves or fruits on a naked tree, and in (66) it is used as an answer to a previous statement to express surprise, and according to the consultant, also to show that “you want to know more about the event”:

- (65). **Ambabae** biki di-no d-a-bule kinhu!
 INTRJ 5.tree 5-DEM.PROX SM5-COP-NEG.POSS 7.thing
 'Ooh, this tree is completely naked (lit. has nothing).'
- (66). a) A-gwee mbwiga miyago, lelo n-i-dondol-a kimulimuli
 VOC-PRO2SG 1.friend 1.my.friend today SM1SG-PST-pick.up-FV 7.phone
 'My friend! I got a phone today'
- b) **Ambabae!**

The word *amba* is found in an old Zalamo text functioning as a conjunction ‘but/however’ (German *aber*) (Meinhof, 1907, p. 106), and it is listed as a conjunction ‘for/because/since’ (ger. *denn*) by Worms (1897, p. 309). In Luguru G35, closely related to Zalamo, the word *ambe* is a marker of epistemic modality, translated by Mkude (1974, p. 309) as ‘I suppose’. At this point, there is no available data of any intermediate stages, functional or formal, which makes it difficult to say for sure if *ambabae* is composed by *amba/ambe* and the negative particle *bae*. However, an interjection expressing disbelief, being derived from two elements with the semantic content ‘I suppose NOT’ or ‘But no!’, certainly provides a tempting hypothesis. On the etymology of *bae*, Devos and van der Auwera (2013, p. 233) mentions the post verbal negator *mbai* in Dawida E74a. According to their personal communication with Philippon, *mbai* is also used as a negative answer ‘no’ and it is derived from a noun meaning ‘side’. Notably, *mbai* shows strong phonological similarities to *bae*, but also to *mbé* used in Kwere and Luguru.

While it seems like *bule* as free standing, post-verbal, element in Zalamo is an adverb, it can be either an adverb or negative particle in Kutu and Kwere. The polyfunctionality therefore raises

the question of how the item is interpreted in different contexts. As shown in (60), *bule* is interpreted as a negative particle after a negated verb in Kwere, but if *bule* is followed by the other negative particle *mbé* as in (67), then *bule* must be interpreted in its adverbial sense, given that stacking of negative particles is not allowed:

- Kwere:*
 (67). Ha-ni-g'h-ile **bule** **mbé**
 NEG.SM1-OM1SG-give-PST **for.free** NEG.EMPH
 ‘S/he did not give (them) to me for free (at all)’

While this sentence was produced by one Kwere speaker, another speaker seems to think it sounds a bit awkward and prefers to use paraphrastic constructions for the adverbial sense such as *bila maliho* ‘without payment’ or *bila kugula* ‘without buying’. This suggests that the more salient meaning of *bule* is a negation marker, or at least that felicity of a construction like this is highly dependent on the dialogue context.

Another interesting detail, which supports the claim that the negative emphatic sense has been bleached in Kutu and Zalamo, is found with prohibitives. In Kwere, *bule* following a prohibitive is interpreted as adding emphasis and “strictly” forbidding something, whereas in Kutu, and less surprisingly Zalamo, it is interpreted in its adverbial sense:

- Kwere:*
 (68). Seke-u-j-e **bule**
 PROH-SM2SG-eat-SBJV NEG.EMPH
 ‘Don’t eat!’

- Kutu:*
 (69). Seke-u-j-e **bule**
 PROH-SM2SG-eat-SBJV **for.free**
 ‘Don’t eat without paying!’

- Zalamo:*
 (70). Sambu-u-j-e **bule**
 PROH-SM2SG-eat-SBJV **for.free**
 ‘Don’t just eat! (you need to work for it)’

The adverbial interpretation in Kutu, suggests that the negative emphatic sense is slightly weaker, or less salient, compared to Kwere, which is further evidenced by a functional distinction between the negative emphasisers *bule* and *ng’o* in Kutu. The latter is typically used to mean ‘never’, whereas *bule* is more common when the speaker wants to emphasize, or strengthen the negation of statement in a scalar fashion:

(71). Si-lond-a **ng'o** ku-ja ng'ho kabili
 NEG-SM1SG **never** INF-eat 9/10.banana again
 'I never want to eat bananas again'

(72). si-lond-a **(bule)**
 NEG.SM1SG-want-FV (**NEG.EMPH**)
 'I (*really*) don't want (it)'

However, the use of *ng'o* is not limited to mean 'never' in the prototypical temporal sense of something that has not, and will not, occur at any time in the past and the future. Just like *bule*, *ng'o* can be added clause finally to emphasise negation or dispute a previous presupposition in dialogue, and *ng'o* is then said to be stronger than *bule*.

Kutu:

(73). gweye sio mtwanzi **bule/ng'o**
 PRO3SG NEG.COP 1.woman **NEG.EMPH**
 'He is definitely not a woman!'

Considering the seemingly higher frequency of *bule* to emphasise negation in my (albeit limited) data and seeing as *ng'o* is semantically slightly broader than *bule* (when the latter is used as a negative particle), it is likely that *bule* is more of a prototypical emphatic negation particle whereas the prototypical use of *ng'o* is the adverbial 'never'. In addition, considering the crosslinguistic tendency of emphatic negative particles to lose some of its strength over time, *ng'o* being stronger than *bule* could suggest that *ng'o* is newer, or at least less frequent, in this function.

A similar development of the same item *ng'o*, is found in other languages, including Swahili. Although it is not very frequent in Swahili²³, *ng'o* exists with the prototypical meaning 'never' (TUKI, 2001), while it can also be used as a more general negative emphasiser:

Swahili G42, (Hurskainen, 2016) (*interpreted by Mohammed Zahran p.c. 2023*):

(74). Si-u-ogop-i uchawi w-ako **ng'o**
 NEG.SM1SG-OM1 I-fear-NEG.PRS 11.witchcraft 11-POSS2SG **NEG.EMPH**
 'I am not afraid of your witchcraft one bit'

In Vidunda (G38), closely related and spoken near Kutu, *ng'o* means 'never' according to Legère (2010 referred to by Bernander et al., 2022), which is also the case in Hehe (G62) (Simon Msovela, p.c. 2023). In a few other Tanzanian Bantu languages, Ndamba (G65), Ngoni

²³ In the Helsinki Swahili corpus, *ng'o* only has 33 hits, compared to for example *kamwe* 'never' that has 1,263 hits (Hurskainen, 2016). According to the native speaker intuition of Mohammed Zahran (2023, p.c.), it also sounds a little old fashioned.

(N12), and Mpoto (N14), *ng'o* is used as a negative emphasiser and/or negative answer particle, rather than as 'never' (cf. Bernander et al., 2022).

Using adverbs to reinforce negation is also the strategy that seems to have replaced the use of the negative particles *bae* and *bule* in Zalamo. The most common one is *kabisa* illustrated in example (75). This adverb is frequently used also in Swahili where it occurs in both in negative contexts to mean 'not at all', and in affirmative contexts to mean 'utterly' or 'exactly' (TUKI, 2001). In Zalamo, depending on context, it can also be used to express 'no longer'/'not anymore' as in (76) or 'never' like in (77):

- (75). dawa i-ya ha-i-ni-togol-a **kabisa**
 9.medicin 9-DEM NEG-SM9-OM1SG-help-FV **at.all**
 'That medicine is not helping me at all'
- (76). Mkulu w-angu ka-ha-duhu **kabisa** Dar es Salaam
 1.big.brother 1-POSS1SG SM1-LOC16-NEG.EX **anymore** Dar es Salaam
 'My brother is not in Dar es Salaam anymore'
- (77). Ha-wa-chol-a **kabisa** Tanzania
 NEG-SM2-go-FV **never** Tanzania
 'They will never leave Tanzania'

The word *ng'hani* also occurs to emphasize negation as in (78), but rather than an emphatic negator, the core meaning of *ng'hani* is that of an adverb meaning 'a lot'. This claim is based on the fact that when *ng'hani* is used with a negated verb, it more often than not falls under the scope of negation rather than emphasizing it. For example, inserting *ng'hani* in the sentence in (79) changes the meaning from the person saying that they did not sleep, to inferring that they actually slept, just not a lot. Furthermore, *ng'hani* cannot be used to dispute a previous utterance in a dialogue, which is a function strongly associated with negative particles. Furthermore, it is used with verbs in the affirmative to add quantity, emphasis, or intensity. Emphasizing negation should therefore be considered more of peripheral function arising in some specific settings.

- (78). si-n-o-gelw-a **ng'hani** kusoma
 NEG-SM1SG-NON.PST-like-FV **a.lot** INF-read-FV
 'I *really* don't like to read'
- (79). mayo ikilo si-was-ile **(ng'hani)**
 yesterday night NEG-SM1SG-sleep-PST **(a.lot)**
 'Last night I didn't sleep (a lot)'

In Kwere, no adverbs were found to reinforce negation, only *bule* and *mbé* were used, which corroborates the fact that the emphatic connotations of *bule* remain strong. Both *bule* and *mbé* must occur post-verbally, but there is some degree of flexibility as they may occur either

immediately after the verb, or after another element, like an object or an adverb (80)-(81). In doing so, it doesn't apparently change the meaning of the utterance, but the speakers sometimes say the position depends on "context", which would require further investigation to determine. Although they are often used interchangeably, the speakers sometimes say that one or the other sounds better in a certain context. For now, no pattern has been identified to explain this preference. Both particles are considered equal in strength and can, according to the speakers, be used regardless of factors like age, gender, politeness and formality. The situation in Kwere appears to be similar to the one described by Mkude (1974, p. 305) for Luguru (G35), which also has two post-verbal negative particles, *mbe* and *baye* (82). Any semantic or pragmatic differences between them, he describes as very difficult to pinpoint.

Kwere:

(80). a) Mulimi ha-lim-a maparachichi **mbé**
 1.farmer NEG-SM1-cultivate-FV 6.avocado NEG.EMPH
 'The farmer is certainly not growing avocados'

b) Mulimi halima **mbé**, maparachichi

(81). a) Mama ha-mbiki²⁴ chila siku **bule**
 1.mother NEG.SM1-cook every 9.day NEG.EMPH
 'Mother does *not* cook every day'

b) Mama hambiki **bule** chila siku

Luguru G35 (Mkude, 1974, p. 308):

(82). Imwana ka-ku-nog-el-a guegue, nene **mbe/baye**.
 9.child SM1-OM1SG-like-APPL-FV PRO2SG, PRO1SG NEG
 'The child likes you, (but) not me'.

The distribution of *bule* as a negative emphatic particle in Kutu, Kwere, and Zalamo, can thus be argued to represent three slightly different stages that are common in the development of post-verbal negative emphasisers:

1. Kwere: *bule* is a negative particle with considerable emphatic force.
2. Kutu: the emphatic connotations of *bule* are somewhat bleached, and it is sometimes replaced by another (adverbial) item
3. Zalamo: The emphatic connotations of *bule* have been lost to a great extent, and it has largely been replaced by other (adverbial) items to express emphasis.

²⁴ The final vowel of the verb is usually *-a* here, the *-i* is likely an influence from Swahili.

The table below shows an overview of the use of *bule* as a post verbal emphasiser negative in the languages under study:

	Kutu	Kwere	Zalamo
Bule as a post verbal negative emphasiser	YES	YES	DOUBTFUL / LOST

Table 3: *bule* as a post verbal negative emphasiser

5.4 *Bule* in negated possessive and locational predication

There is considerable variation in the marking of negative possessive and locational predication in the languages under study. In what follows, the different strategies will be accounted for. In all three languages, *bule* is used in negative possessive predication, and in Kwere it is also used in negative locational predication.

Chronologically, the first expansion of *-bule* into the domain of negative predicative uses, is negative predicative possession. Hence, the functional expansion of *bule* is represented as:

adverb > *negative possessive predication* > *negative inversed locational predication* > *negative plain locational predication*

Many of the adverbial notions of *bule* ‘free, for no reason, in vain’ can effectively be paraphrased as ‘lacking’ or ‘not having’ something (e.g., ‘not having a price’, ‘not having a reason’, or ‘not having success’). In the section that follows, it will be made clear how the addition of subject marking and a copular element has caused *bule* to be grammaticalized as part of a negative Comit-type possessive of the sort ‘be without’.

The development from possessive to locational predication should be considered linear in the order possessive>inversed locational>plain locational. Typologically, the pathway ‘have>exist’ (possessive>locational predication) has been proposed as unidirectional by Heine and Kuteva (2002, pp. 241–242), but caution is advised since Bernander et. al (2021) have attested the opposite direction for some Bantu languages, including Tanzanian Ngoni. If the etymology of the source item is not transparent, they write that it can be difficult to determine the pathway. The etymology of *bule* itself does not clearly suggest that the change has gone in one or the other direction. Effectively, the adverbial senses could just as well be paraphrased as ‘there not being a price/reason/success’. Instead, evidence of the expansion having gone in the direction ‘possessive>inversed locational>plain locational predication’ can be clearly postulated based on microvariation and morphosyntactic features outlined in the sections that follow.

5.4.1 Negated possessive predication

All languages under study have a multitude of constructions in which they predicate negative possession. All three languages very frequently use *-bule* preceded by a subject marker and followed by the (non-) possessee. This construction is also attested in Kami. All subject markers preceding *bule* are followed by a vowel ‘a’, which is hypothesized to be a trace of the copular verb *-wa* ‘to be’. In Kutu, *-duhu* is used interchangeably in this function, but it is only occasionally preceded by the vowel *-a*²⁵:

Kutu:

(83). a) Gweye kw-a-**bule** simu y-a sambi
 PRON2SG SM2SG-COP-NEG.POSS 9.phone 9-AS now
 ‘You don’t have a new phone’

b) Gweye ku-**duhu** simu y-a sambi
 PRON2SG SM2SG-NEG.POSS.COP 9.phone 9-AS now
 ‘You don’t have a new phone’

Kwere:

(84). Mweye mw-a-**bule** ng'ombe
 PRO2PL SM2PL-COP-NEG.POSS 9/10.cow
 ‘You (all) don’t have cows’

Zalamo:

(85). mwana hi-no k-a-**bule** nzonzi
 1.child 1-DEM.PROX SM1-COP-NEG.POSS 9.sense
 ‘This child has no sense’

Kami (Petzell & Aunio, 2019, p. 586)

(86). W-a-**bule** heshima
 SM2-COP-NEG.POSS 9/10.respect
 ‘They have no respect’

Similar, or identical, constructions have been found in languages spoken nearby such as Ndengeleko, Ndamba, Pogolo, and Vidunda. In Ndengeleko, *-topu*, from Proto Bantu **-tópó*, cognate to *-duhu*, is used for negative possessive predication, only sometimes preceded by what Ström (2013, p. 284) refers to as “a copula like” vowel *a*.

Ndengeleko P11-12 (Ström, 2013, p. 284):

(87). twa a-topu
 SM1PL a-without
 ‘We don’t have’

²⁵ With some of the subject markers such as *na-* (1st person sg.) and *ka-* (3rd person sg.) ending with the same vowel *-a*, it makes it difficult to know whether there is an underlying copula vowel there or not.

Ndamba, Pogolo, and Vidunda make use of the item *hela/hera*. In Ndamba, *hela* is referred to as a negative particle by Novotná (2005, p. 140), who writes that it can either be used together with the copular verb *-va* ‘be’ (88)a, or also just preceded by a vowel *a*, which she analyses as a connective (i.e., associative) vowel (88)b.

Ndamba G52 (Novotná, 2005, p. 140):

- (88). a) Libiki ali li-v-a hela mihamba
 5.tree DEM5 SM5-be-FV NEG.PART 4.leaves
- b) Libiki ali li-a hela mihamba
 5.tree DEM5 5-AS NEG.PART 4.leaves
 ‘This tree does not have leaves’

Pogolo G51 (Hendle, 1907, p. 44) (glossing added)

- (89). Nene **nehera** upuere
 Nene ni-a-**hera**²⁶ upuere
 PRO1SG SM1SG-COP-NEG.POSS 11.laziness
 ‘I am not lazy’ (lit. ‘I lack laziness’)

Vidunda G38 (Legère & Mkwana’hembo, 2019) (glossing added)

- (90). Hima hima y-a-**hela** mboto
 Hurry hurry SM9-COP-NEG.POSS blessing
 ‘Hurry hurry doesn’t have blessings’ (proverb)

Here, my analysis differs from that of Novotná (2005). In my view, these constructions represent different surface forms of the same construction, in which example (88)b has just undergone phonological reduction. I believe that these constructions, *-bule* in Kutu, Kwere, Zalamo, and Kami; *-duhu* in Kutu and Ndengeleko; and *hela/hera* in Ndamba, Pogolo, and Vidunda is essentially one and the same negative Comit-type possessive construction, in which a copular element precedes the lexical element denoting negative possession, together creating the sense of ‘be without’. When the copulative vowel *-a* is dropped from the constructions with *-duhu* in Kutu and Ndengeleko, it is indicative of *-duhu* having gained a copulative function in addition to the earlier developed function of negative possession; a development that is very similar to that of the comitative marker *na* developing into a possessive copula, as mentioned in 3.2.1.

Now, the argument that all these items are, at least originally, preceded by a copulative item can be motivated in series of ways. Firstly, there is no sustainable functional motivation for an associative vowel to intervene in such a construction. An associative marker occurring in

²⁶ The surface form is given as *nehera*, but the subject marker is *ni-*, thus suggesting *ni-a* as the underlying structure.

predicative possession would probably have to be some sort of *genitive possessive* schema, with the typologically attested alternatives being either Creissels' (2022) 'Exist Possessive type with genitive coding' or what Stassen (2013) refers to as a 'Genitive Possessive' construction. The first one requires an existential predicator and the second one necessarily has the possessed item encoded as the grammatical subject; none of which applies for the construction in Ndamba. What is more, none of these types have been attested in Bantu, and they are in fact extremely rare in Africa as a whole (Creissels, 2022). On the contrary, the copular element is well motivated from a functional and typological perspective, as it rather transparently forms a negative possessive predication construction of the Comit-Type, which is one of the most frequent types in Bantu.

Secondly, both the claim that *-duhu* has developed the copular function subsequent to the negative possessive one, and the claim that *bule* is preceded by a copula, can be evidenced by looking at certain more 'conservative' morphosyntactic contexts. Conservative contexts include, for example, subordinate clauses that according to Dimmendaal (2011, p. 148), frequently "reveal archaic properties of languages which have disappeared from main clauses". Main clauses, on the other hand, are much more prone to syntactic and pragmatic innovation. The reason for main clauses constituting a more favourable context for innovation is assumed to be because of their "high frequency and corresponding communicative dynamism" (Dimmendaal, 2011, p. 148). In all three languages, *bule* occurs with the copula *-li* in relative clauses, and in Kutu, the same construction can be attested for *-duhu*. Examples (91) and (92) show relative clauses in Kutu and Kwere, and example (93) shows the occurrence of *-li* plus *-bule* in a subordinate clause in Zalamo:

Kutu:

(91). a) N-o-m-on-a munhu ya-**li-bule** ng'ombe
SM1SG-NON.PST-OM1-see-FV 1.person DEP.SM1-COP-NEG.POSS 9.cow
'I see a person who does not have a cow'

b) N-o-m-on-a munhu ya-**li-duhu** ng'ombe
SM1SG-NON.PST-OM1-see-FV 1.person DEP.SM1-COP-NEG.POSS 9.cow
'I see a person who does not have a cow'

Kwere:

(92). Maduka ye-**li-bule** wagulaji
6.shop DEP.SM6-COP-NEG.POSS 2.buyer
'Shops that do not have customers'

Zalamo:

- (93). Habali mu-long-el-a avija vi-mu-**li-bule** mikate?
 why SM2PL-speak-APPL-FV like TEMP-SM2PL-COP-NEG.POSS 4.bread
 ‘Why are you talking like as if you don’t have any bread?’

In this sense, both *-bule* and *-duhu* can be said to function as a negated comitative marker, in a type of negative Comit-Type possessive, ‘be without’, as opposed to the negative Have-Type possessive ‘not have’ when the copulative element has been dropped.

Even prior to this development of *bule*, it is possible that the function of *bule* in negative predicative possession, was in fact only negation. Worms (1897, p. 292), has an example of ‘*ka bule*’ followed by the comitative *na* as a counterpart to the affirmative construction *kana* ‘s/he has’, illustrated in examples (94)a-b. This one example is the only attestation of such a construction, and any attempts to use *na* after *bule* are immediately rejected by my consultants in all three languages, including in the above-mentioned ‘conservative contexts’.

Zalamo, (Worms, 1897, p. 292)

- (94). a) munhu **ka-na** akili
 1.person SM1-COM intelligence
 ‘An intelligent person’
- b) munhu **ka bule na** akili
 1.person SM1 NEG COM intelligence
 ‘A stupid person’

While this particular stage in the grammaticalization process is uncertain, there is further synchronic evidence of *bule* encoding the function of negative possession, while requiring a copular element. Subjunctive and infinitive constructions in *Zalamo*, reveals what is hypothesized as the source of the copular vowel ‘*a*’, namely the copular verb *-wa* ‘to be’. In the subjunctive mood in *Zalamo*, shown in examples (95)a-b, and the infinitival construction shown in (96), *bule* is preceded by *-wa*. Intuitively, the same argument that the frequency of main clauses compared to dependent ones make the latter less prone to innovation, could also be applied to distinction between the indicative and the subjunctive moods, as well as finite versus non-finite verbs. It is therefore hypothesised that the comparatively less frequent forms subjunctives and infinitives have retained an older form of *bule* here, preceded by the copular verb. Note also in example (95)a, the occurrence of the ‘dependent subject marker’ *ya-* (used in relative and conditional clauses), rather than *ka-* which is found in main clauses.

Zalamo:

- (95). a) yoyose sambi-ya-**w-e=bule** hishima
 PRON PROH-DEP.SM1-**be**-SBJV=NEG.POSS 9.respect
 ‘Nobody should lack respect’

b) N-o-lond-a ni-**w-e**=bule mijabuko
 SM1SG-NON.PST-want-FV SM1SG-be-SBJV=NEG.POSS 4.problems
 ‘I want to have no problems’

(96). Ku-**w-a**=bule nhamanila viha
 INF-**be**-FV=NEG.POSS 9.faith 8.bad
 ‘To not have faith is bad/dangerous’

Since the final vowel (*-a* or, in the subjunctive, *-e*) typically occupies the last slot in the verbal template, *bule* might not be analysed as part of the verb. It is however, strongly linked to the verb prosodically, and nothing can intervene between the verb and *bule* in these constructions. The consultants claim that *sambiyawebule* and *kuwabule* are each one indivisible word. It is consequently hypothesized that *bule*, as an initial step on its grammaticalization path into becoming a negative predicative possessor, was cliticized onto the copular verb *-wa*, which through phonological reduction when merging with the subject marker, only retains the final vowel *-a*, i.e., something like ‘*nawabule* → *nabule*’ and ‘*muwabule* → *mwabule*’.²⁷ The same analysis could then be applied to the examples from Ndamba, repeated below with updated glossings:

Ndamba G52 (Novotná, 2005, p. 140):

(97). a) Libiki ali li-**v-a**=hela mihamba
 5.tree DEM5 SM5-be-FV=NEG.POSS 4.leaves
 b) Libiki ali li-**a**=hela mihamba
 5.tree DEM5 SM5-COP=NEG.POSS 4.leaves
 ‘This tree does not have leaves’

With the underlying form, established, we can look closer at the functional distribution of *-bule* as a component of negative possessive predication in Kutu, Kwere and Zalamo. In all three languages, *-bule* (and in Kutu also *-duhu*) is used in the past tense, preceded by an auxiliary verb ‘to be’, which is inflected for tense:

Kutu:

(98). a) N-g’hal-**a**²⁸ n-**a-bule** sendi
 SM1SG.PST-be-FV SM1SG-COP-NEG.POSS 9.money
 ‘I didn’t have money’
 b) N-g’hal-a na-**duhu** sendi
 SM1SG.PST-be-FV SM1SG-NEG.POSS.COP 9.money
 ‘I didn’t have money’

²⁷ In *mwabule* the underlying form is *mu-a-bule* (SM2PL-COP-NEG.POSS), and the vowel *u* becomes a semi-vowel *w*.

²⁸ The underlying form is *n-i-kala*, which is often contracted to *ng’hala*

Kwere & Zalamo:

- (99). N-i-kal-a n-a-**bule** hela
 SM1SG-PST-be-FV SM1SG-COP-NEG.POSS 9.money
 ‘I didn’t have money’

Interestingly, when an adjectival element is added to soften the negation, another construction is frequently used. Instead of an inherently negative element, the predicative possessive construction *-kala na* ‘be with’ is negated by adding a negation marker to the copular verb ‘be’, thus forming the Comit-Possessive type construction ‘not be with’, illustrated in example (100) from Kutu. More data is needed to confirm this pattern, but it suggests that the inherently negative elements *-bule* and *-duhu*, are “stronger” and more associated with a binary distinction between “having” and “not having”. In other words, the speakers opt for standard negation of the affirmative construction *-kala na* ‘be with’, when the negation is softened to express a degree of absence. The hypothesis that *-bule* is more absolute in expressing absence, is further strengthened by the Kwere examples in (101); only the construction with standard negation of *-kala na* can be emphasised by the addition of *mbé* or *bule*. It is not possible to add *mbé* or *bule* as negative emphasisers when negative possession is expressed using *-bule*. The speakers then claim that the first *-bule* is “strong enough”.

Kutu:

- (100). Si-kal-ile na sendi nyingi
 NEG.SM1SG-be-PST COM 9.money 9.much
 ‘I didn’t have much/enough money’

Kwere:

- (101). a) si-kal-ile na hela **mbé/bule**
 NEG.SM1SG-be-PST COM 9.money NEG.EMPH
 ‘I didn’t have any money at all!’
- b) n-i-kal-a n-a-**bule** hela **#mbé/bule**
 SM1SG-PST-be-FV SM1SG-COP-NEG.POSS 9.money NEG.EMPH
 ‘I didn’t have any money at all!’

The suggestion that *bule* has retained strong emphatic connotations as a negative particle in Kwere, consequently, seems to have effects also on its use as a negative predicator. This theory could be further supported by the fact that *-bule* in negative possessive predication was never produced in the future or in the subjunctive in Kwere. Future and subjunctives are both irrealis categories (Velupillai, 2012), which suggests that the absolute absence expressed by *-bule* in Kwere might not be perceived as compatible with the element of uncertainty that is normally associated with irrealis. In Kutu, on the other hand, *-bule* is used in the future tense with a similar construction to the one used for the past, with the auxiliary verb *kuwa* ‘to be’ carrying

the tense marking (102). Such a construction is not attested in Kwere, as the speakers resort to either the negative verb *swela* ‘lack, fail’ (103)a, or standard negation of affirmative the Comit-Possessive type construction *-wa na* (103)b-d:

Kutu:

- (102). mayo, n-o-kuw-a n-a-bule sendi
 9.tomorrow SM1SG-NON.PST-be-FV SM1SG-COP-NEG.POSS 9.money
 ‘Tomorrow, I won’t have any money’

Kwere

- (103). a) igolo kwi-za-swel-a hela
 9.tomorrow SM2SG-FUT-lack-FV 9.money
 ‘Tomorrow you wont have any money’
- b) ivo igolo si-za-kuw-a na mwanza wowose
 so 9.tomorrow NEG.SM1SG-FUT-be-FV COM 3.travel 3.any
 ‘...so tomorrow I will not have any means of travel’
- c) yelo chi-za-kuj-a goya, honda-chi-w-e na nzala
 9.today SM1PL-FUT-eat-FV well NEG.FUT.COND²⁹-SM1PL-be-SBJV COM 9.hunger
 ‘Today, we will eat well, we shall not be hungry’ (lit. be with hunger’)
- d) n-o-lond-a seke-ni-w-e na shida
 SM1SG-PRS-want-FV PROH-SM1SG-be-SBJV COM 9/10.problem
 ‘I don’t want to have any problems’

In Zalamo, *bule* can also be used in the future tense, but notably with tense marking directly on the item itself, thus showing signs of having acquired more verb-like features. Normally, the tense marker occurs immediately after the subject marker and before any copular or verbal element. Therefore, the vowel ‘a’ could be analysed as belonging the subject marker. No copula vowel directly preceding *-bule*, suggests that the item itself has acquired the copular function, similar to *-duhu* in Kutu. The line between copula and verb, is not easy to draw, but there are still some important verbal characteristics that have not been attested for *-bule* nor *-duhu*, such as a final vowel *-a*, or derivational suffixes.

Zalamo:

- (104). mayo na-**o-bule** hela
 9.tomorrow SM1SG-NON.PST-NEG.POSS.COP 9.money
 ‘Tomorrow, I won’t have any money’

Lastly, negative alienable possession of an inanimate possessor is frequently expressed using the same negative possessive predication constructions. As discussed in 3.2.3, this is taken as evidence of a very strong semantic affinity between possession and location in these languages,

²⁹ The exact meaning of *honda* remains unclear at this point, and the glossing is tentative. It has been reported as a “futurum conditional” in Zalamo by Worms (Worms, 1897, p. 306),

which may be a facilitator in the continued development from possessive>locational predication. Recall from section 3.2.3, that main semantic concepts of predicative possession can be construed as ‘control’ and ‘location’. Since an inanimate possessor cannot typically exert control, alienable possession of an inanimate possessor often requires a distinction construction, that focuses the ‘locational’ feature of the construction [+location]. This is not case in at least Kutu and Kwere where [+location] is already salient as it is. In the examples below, regular possessive predication constructions are used, as opposed to the English translations that require a prepositional phrase to focus [+location], over the other possible alternative [+control]. This is likely the case also in Zalamo, although I do not have such data at this point.

Kutu:

- (105). kigelo ch-a-bule usage
 7.basket SM7-COP-NEG.POSS 11.flour
 ‘The basket has no flour *in it*’

Kwere

- (106). Barabara ha-i-kuw-a na magari.
 9.road NEG-SM9-be-FV COM 6.car
 ‘The road didn’t have any cars *on it*’ (i.e., ‘there were no cars on the road’)

To summarize the present section, it has been showed that all the languages under study have multiple strategies for encoding negated predicative possession. The table below shows the items involved in negated possessive predication constructions in each of the languages:

	Kutu	Kwere	Zalamo
Negated possessive predication	-bule -duhu NEG+kuwa na	-bule NEG+kala na NEG+kuwa na -swela	-bule NEG+kala na

Table 4: Negated possessive predication constructions in Kutu, Kwere, & Zalamo

The adverbial senses of *bule* are argued to have an underlying semantic notion of ‘lacking something’, which explains the semantic expansion into negative possession. The attestation of *-bule* in a range of morphosyntactic contexts shows that it has been grammaticalized as negative Comit-Possessive type preceded by a copular element, i.e., ‘be without’. By analysing comparative data from closely related languages, it has been showed this type of development seems to be a re-occurring areal feature. Identical developments have occurred in which elements with similar adverbial notions to *bule* are incorporated into negative Comit-Possessive constructions with a copular element. The copular element then undergoes phonological reduction until it may finally disappear altogether, resulting in the copulative function being

“absorbed” by the originally adverbial element. In this way, it can be reanalysed as negative possessive copulative element of the Have-Possessive type.

In terms of language internal distribution of *-bule* in negated predicative possession, it seems to bear connotations of an absolute distinction between having and not having. This evidenced by the fact that i) other constructions are frequently used to express degrees of absence; ii) *-bule* in negative predicative possession cannot be emphasised through the addition of a postverbal emphasiser; and iii) In Kwere, *-bule* does not occur in the grammatical mood of irrealis, supposedly due to the degree of uncertainty that is associated with this domain.

5.4.2 Negative locational predication

As outlined in chapter 3.2, there is a strong link between the semantic concepts of possession and location, and cross-linguistically the same predicator is commonly involved in constructions encoding both functions. This section will present the attested constructions for negated locational predication in Kutu, Kwere, and Zalamo. In doing so, it will highlight the overlap of one and the same predicator being used in both possessive and locational predication, *-bule* in Kwere and *-duhu* in Kutu. Furthermore, it will be argued that this overlap is a result of cyclical change, in which a source item is recruited onto a predictable conceptual pattern represented as *adverb > negated possessive predication > negated inversed locational predication > negated plain locational predication*.

Drawing from Heine (1991, p. 246) and Heine & Reh (1984, pp. 72–74), cyclical change is to be understood as a process in which one grammatical form starts to decline or disappear and in doing so, a new item is incorporated with similar or identical semantic and morphosyntactic features, finally replacing the previous one. If such a cycle is repeated, it is referred to as a recursive cycle. As will be shown, the distributions of *-bule* and *-duhu* in the languages under examination suggest that *-bule* has been incorporated onto a similar pathway of change, previously undergone by *-duhu*.

The first type of negative locational predication, derived from negative possessive predication, is with the inversed perspectivization GR>FG ‘ground>figure’. The construction is morphosyntactically identical to that of possessive predication, but with an expletive subject marker, derived from one of the locative noun classes 16, 17, or 18 (*ha-*, *ku-*, *mu-*). The word order is typically, but not necessarily inversed, so that the predicative element comes first. In Kutu and Zalamo, the predicator is *-duhu* whereas Kwere and Kami use *-bule*:

Kutu

- (107). **Ha-duhu** simu^{figure} m-meza^{ground}
SM16_{EXPL}-NEG.LOC.COP 9.phone LOC18-9.table
 ‘There is no phone on the table’

Kwere:

- (108). Dar es Salaam **kw-a-bule** nhembo
 Dar es Salaam **SM17**_{EXPL}-COP-NEG.LOC 9/10.elephants
 ‘There are no elephants in Dar es Salaam’

Zalamo:

- (109). **Ku-duhu** muju
SM17_{EXPL}-NEG.LOC.COP 3.food
 ‘There is no food’

Kami, (Petzell & Aunio, 2019, p. 587):

- (110). Sweden **h-a-bule** tangawizi
 Sweden **SM16**_{EXPL}-COP-NEG.LOC 9/10.ginger
 ‘There is no ginger in Sweden’

As shown in the glossing, *-bule* is preceded by a copula vowel just like in predicative possession, whereas *-duhu* is not. This means that *-bule* is typologically categorizable as a *be_with-IPL* construction, or in alternative terminology, a Comit-type negative existential. The item *-duhu* on the other hand, is analysed as a *have-ILP* construction. The inversed locational predication constructions with *-duhu* in Zalamo implies that although there is no synchronic evidence of *-duhu* as a negative possessive copula in Zalamo, it must have been used in this function at some point, supposedly before it was replaced by *-bule*. This claim is also supported by the attestation of *-duhu* in negative possessive predication in Kutu.

The negative IPL constructions in Kutu, Kwere, and Zalamo may or may not overtly include the ground noun phrase which, if it is present, takes a locative noun class prefix unless it is a place name. The locative prefix may or may not show agreement with the expletive locative subject marker. In Kutu there is quite a bit of variation and too little data to say anything about frequency or patterns. In Kwere, most, but not all sentences take agreement as can be seen in the agreeing construction in (111) vs the non-agreeing one in (112). In Zalamo, *haduhu* seems to be the default construction although *kuduhu* also occurs as in (109). Non-agreeing locative marking and a particular subject marker being very frequent, may suggest that the construction has been conventionalised as a such (cf. Bernander et al., 2020):

Kwere:

- (111). **H-a-bule** ndya **ha-moto**
SM16_{EXPL}-COP-NEG-LOC 5.food **LOC16**-9.kitchen
 ‘There is no food in the kitchen’

- (112). **H**-a-bule simu **mw**-imeza
SM16_{EXPL}-COP-NEG.LOC 9.phone **LOC18**-9.table
 ‘There is no phone on the table’

Just like the possessive constructions, *-duhu* and *-bule* as locational predicators can also be used in the past tense by means of an auxiliary construction. Here, both the auxiliary and the predicator carry expletive subject marking that may or may not agree. In Kutu, the few examples in my data all show agreement between the subject markers (113), and the same is true for Kwere, for which there is more data (114)-(115). In Zalamo, on the other hand, the subject markers tend not to agree. In fact, agreeing patterns were even rejected, possibly because the auxiliary to an extent has been conventionalised as *kukala* and the predicator as *haduhu* (116). At least in Kwere and Zalamo, standard negation of the affirmative constructions *ku-kala na* ‘there be with’, or in Kwere also just *ku-kala* ‘there be’, were sporadically used in the past tense. In the terminology used to talk about types of negative existentials in the negative existential cycle, Kwere and Zalamo can thus be categorized as belonging to both type A~B. They may use either standard negation of an existential construction or dedicated negative existential predicator in *-duhu* or *-bule*:

Kutu:

- (113). **Ku**-kal-a **ku**-duhu ng'hoo zipile
SM17_{EXPL}-be-FV **SM17**_{EXPL}-NEG.LOC.COP 10.banana 10.ripe
 ‘There were no ripe bananas’

Kwere

- (114). a) **Ku**-kal-a **kw**-a-bule munhu **kw**-isule
SM17_{EXPL}-be-FV **SM17**_{EXPL}-COP-NEG.LOC 1.person **LOC17**-9.school
 ‘There were nobody by the school’
- (115). a) **Ha**-kal-a **h**-a-bule munhu **ha**-dikanisa
SM16_{EXPL}-be-FV **SM16**_{EXPL}-COP-NEG.LOC 1.person **LOC16**-5.church
- b) **M**-kal-a **mw**-a-bule munhu **m**-dikanisa
SM18_{EXPL}-be-FV **SM18**_{EXPL}-COP-NEG.LOC 1.person **LOC18**-5.church
 ‘There was nobody in church’

Zalamo:

- (116). a) **Ku**-kal-a **ha**-duhu munhu **ku**-mgunda
SM17_{EXPL}-be-FV **SM16**_{EXPL}-NEG.LOC.COP 1.person **LOC17**-3.farm
- b) #**Ku**-kal-a **ku**-duhu munhu **ku**-mgunda
SM17_{EXPL}-be-FV **SM17**_{EXPL}-NEG.LOC.COP 1.person **LOC17**-3.farm
 ‘There was nobody at the farm’

One more argument for *haduhu* and *kaduhu* having been conventionalized as a whole, is that they may be used as indefinite pronouns ‘none, nobody’, which is a common expansion of

‘negative existentials’ (cf. Haspelmath, 1997; Veselinova, 2013). In Kwere, *habule* must be followed by *munhu* ‘person’ to express ‘nobody’, literally ‘there is no person’, whereas in Kutu and Zalamo, *munhu* ‘person’ can be dropped:

Kwere:

- (117). **H-a-bule** **munhu** ya-mw-on-ile mkae m-yangu
 SM16_{EXPL}-COP-NEG.LOC 1.person DEP.SM1-OM1-see-PST 1.neighbour 1-POSS1SG
 ‘Nobody saw my neighbour’ (lit. ‘There is no person who saw my neighbour’)

Kutu/Zalamo:

- (118). **haduhu** ya-mw-on-ile
 SM16_{EXPL}-NEG.LOC.COP DEP.SM1-OM1-see-PST
 ‘Nobody saw him/her’ (lit. ‘There is none who saw him/her’)

Kwere is the only language for which I have data in the future tense, and the pattern is the same as for possessive predication, i.e., *-bule* does not occur, instead, standard negation is applied to the affirmative construction. Interestingly, in my data, the copula verb is always *kuwa* ‘be’ in the future, while *-kala* ‘be’ is used for the past.

- (119). Kw-iza-kuw-a na nyama, nguku, ng'hoo mbali
 SM17_{EXPL}-FUT-be-FV COM 9/10.meat 9/10.chicken 9/10.banana but
ha-kw-iza-kuw-a **na** somba
 NEG-SM17_{EXPL}-FUT-be-FV COM 9/10.fish
 ‘There will be meat, chicken, (and) bananas but there will not be (any) fish’

Both *-bule* in Kwere and *-duhu* in Kutu and Zalamo, with expletive locative subject marking are dedicated to inversed locational predication. However, both may also take additional inflectional morphology, turning them into predicators of plain locational predication. This brings us to the third and final predicative function in the cycle:

adverb>*negated possessive predication*>*negated inversed locational predication*>
negated plain locational predication

The constructions used for plain locational predication are derived from the ILP constructions by the addition of a subject marker before the expletive locative subject marker. Diachronically, a second subject marker is thus added to the construction. The new subject marker agrees with the figure and the old subject marker is now in the position where an object marker would typically occur. The old subject marker could therefore potentially be reanalysed as a locative object marker, that may or may not agree with the locative marking on the noun that represents the ground. The construction is also found in Kami:

Kami (Malin Petzell, p.c. 2023):

- (120). Niye **na-ha-bule** ku-gati
 PRO1SG SM1SG-LOC16-COP-NEG.LOC LOC17-5.inside
 ‘I am not inside’

Kutu:

- (121). Nyabo^{figure} **wa-ku-duhu** m-dibiki^{ground}, wa-hasi³⁰
 10.monkey SM2-LOC17-NEG.LOC.COP LOC18-5.tree SM2-ground
 ‘The monkeys are not in the tree, they’re on the ground’

Kwere

- (122). Mwan=angu **ka-h-a-bule** ha-kae
 1.child=POSS1SG SM1-LOC16-COP-NEG.LOC LOC16-9.home
 ‘My son is not at home’

Zalamo

- (123). simu y-angu **ya-ha-duhu** ha-meza
 9.phone 9-POSS1SG SM9-LOC16-NEG.LOC.COP LOC16-9.table
 ‘My phone is not on the table’

This construction, considered the most recently innovated one, is used in plain locational predication, nonetheless it can also encode ‘absolute’ or ‘pure’ existence. In doing so, the perspectivization is still FG>GR which is shown by the subject marker agreeing with the figure noun phrase, as seen in (124) and (125)a. The same type of existence can also be encoded using the IPL constructions, showed in (125)b and (126), which highlights the point made in 3.2.2.1 that ‘existentials’ is a rather misleading term for inversed locational predication:

Kutu:

- (124). ng'ombe wa-dy-ag-a simba wa-ha-duhu
 10.cow SM2-eat-HAB-FV 10.lion SM2-LOC16-NEG.LOC.COP
 ‘Cows that eat lions do not exist’ (lit. ‘Cows that eat lions are not (here/there)’)

Kwere:

- (125). a) Wa-kw-a-bule simba w-o-j-igw-a na ngombe
 SM2-LOC17-COP-NEG.LOC 10.lion SM2-PRS-eat-PASS-FV COM 10.cow
 ‘Lions that are eaten by cows do not exist’ (lit. ‘...are not (here/there)’)
- b) h-a-bule ngombe w-o-j-a simba
 SM16^{EXPL}-NEG.LOC.COP 10.cow SM2-NON.PST-eat-OM2-FV 10.lion
 ‘There are no cows that eat lions’

Zalamo:

- (126). Ha-duhu ng'ombe w-o-m-j-a simba
 SM16^{EXPL}-NEG.LOC.COP 10.cow SM2-NON.PST-eat-OM2-FV 10.lion
 ‘There are no cows that eat lions’

In Kutu and Zalamo, *-duhu* as a plain locational predicator can be used also in the past tense, whereas in Kwere the construction with *-bule* is restricted to the present tense. In the past and the future, instead of *-bule*, there is standard negation of one of the copular verbs *-kala* or *-kuwa*

³⁰ The noun *nyabo* ‘monkeys’ belongs to noun class 10 but takes subject marking from noun class 2 because it is animate.

‘be’, plus a demonstrative or a noun with locative marking. The fact that *-bule* in plain locational predication only occurred in the present tense in Kwere, could also be taken as evidence of this being a more recent innovation:

Kutu:

- (127). ng'hoo zi-kal-a ku-duhu
 10.banana SM10-be-FV LOC17-NEG.LOC.COP
 ‘Bananas were not there’ (i.e., ‘There were no bananas there’)

Zalamo:

- (128). ng'hoo zi-kal-a ha-duhu
 10.banana SM10-be-FV LOC16-NEG.LOC.COP
 ‘Bananas were not there’ (i.e., ‘There were no bananas there’)

Kwere:

- (129). ng'hoo ha-zi-kal-ile ba-ho
 10.banana NEG-SM10-be-PST 16-DEM.REF
 ‘Bananas were not there’ (i.e., ‘There were no bananas there’)

- (130). Tata he-za-kuw-a ha-kae chigulugulu
 1.father NEG.SM1-FUT-be-FV LOC16-9.home 7.evening
 ‘Father will not be home tonight’

The encoding of negative plain locational predication in Kutu, Kwere, and Zalamo exhibits even more variation. Besides the constructions with *-bule/-duhu* and the copula verbs *-kala/-kuwa*, this function can also be expressed using a standard negator and the copula *-li*. As mentioned in 5.4.1, this copula is found in dependent and relative clauses, but it also occurs in negation of some ascriptive³¹ predicative functions, e.g., ‘I am a not a teacher’.

Kutu:

- (131). Simu y-angu **ha-i-li** m-meza
 9.phone 9-POSS1SG **NEG-SM9-COP** LOC18-9.table
 ‘My phone is not on the table’

Kwere:

- (132). Godilo **ha-di-li** ku-tali mbé
 5.market **NEG-SM5-COP** LOC17-long NEG.EMPH
 ‘The market is not far away at all’

Zalamo:

- (133). Twa-m-hwani, **ha-tu-li** ku-ngunda
 SM1PL-LOC18-town **NEG-SM1PL-COP** LOC17-3.farm
 ‘We are in town, we’re not at the farm’

The present section has shown that negative inversed locational predication is commonly expressed using constructions with *-bule* in Kwere and *-duhu* in Kutu and Zalamo. These constructions are directly derived from the constructions for negative predicative possession.

³¹ This terminology is adopted from (Hengeveld, 1992)

The two are formally identical with the only difference being that the IPL constructions take an expletive subject marker from one of the locative noun classes. Subsequent to this development, the IPLs have continued to grammaticalize into functions, cross-linguistically associated with ‘negative existentials’ such as indefinite pronouns and the interjection *habule* ‘no’ mentioned in section 5.2.

Next, the IPL constructions have further developed into constructions expressing plain locational predication. The claim that this development is subsequent is founded firstly in the fact that the new construction is rather transparently morpho-syntactically derived from the older one by the addition of a subject marker. Secondly, the domain of plain locational predication also exhibits a lot of variation in terms of which copulative element can be used, and thirdly the construction with *-bule* in plain locational predication in Kwere only occurs in the present tense, making it the most restricted one of the predicative uses. The pathway of the newly acquired predicative functions of both *-bule* and *-duhu* is illustrated as follows:

(0)adverb > (1)negative possessive predication > (2)negative inversed locational predication > (3)negative plain locational predication.

Based on the distributions of *-duhu* and *-bule* in the different languages, the development of *-duhu* must have occurred prior to that of *-bule*. The data from Kutu, is interpreted as *-duhu* having developed all predicative functions 1, 2, and 3, in the cycle, after which *-bule* has been introduced and is starting to compete with *-duhu* in predicative function 1 (possession). Zalamo is taken to represent a subsequent stage, in which *-bule* has completely replaced *-duhu* in the first predicative function, but *-duhu* is still maintained in functions 2 and 3. In Kwere, *-bule* has developed all functions 1, 2, and 3, and there is no synchronic (nor diachronic for that matter) evidence of *-duhu* in any of these functions. The table below presents the items involved in negative locational predication in Kutu, Kwere, and Zalamo:

	Kutu	Kwere	Zalamo
Negative inversed locational predication	-duhu	-bule NEG + -kuwa na NEG + -kala na NEG + -kala	-duhu NEG + -kala na
Negative plain locational predication	-duhu NEG + -li NEG + -kala	-bule NEG + -li NEG + -kala NEG + -kuwa	-duhu NEG + -li NEG + -kala

Table 5: Constructions used for negative locational predication in Kutu, Kwere, and Zalamo

5.5 The pathway of *bule* as an areal feature: comparable items

The cyclical change proposed for both *-bule* and *-duhu* i.e., *adverb* > *negative possessive predication* > *negative inversed locational predication* > *negative plain locational predication*; can be supported by looking at the occurrence of *-duhu* in neighbouring languages to Kutu, Kwere, and Zalamo. Additionally, the same cyclical change is suggested for the item *-hela* mentioned as a negative possessive predicator in Ndamba, Pogolo, and Vidunda in section 5.4.1, despite the original source item of *hela* being a verb **-péd-*, ‘end (intr.) get lost’. All these items have developed a wide range of functions that are remarkably similar and shows that, as an areal feature, there is a strong interrelatedness between the functions of:

- (i) adverbial senses: ‘in vain’, ‘for nothing’, ‘useless’, ‘free’ ‘only’, ‘just’
- (ii) emphatic negation markers
- (iii) negative possessive and locational predication

First, the origin of *hela* will be established and the semantic relationship between the different adverbial uses will be highlighted through comparative data from East and Southern Bantu. Secondly, the pathway of the cyclical change *adverb* > *negative possessive predication* > *negative inversed locational predication* > *negative plain locational* will be examined by looking further at the development of *-duhu* and *-hela* in Ndamba, Ndengeleko, Pogolo, and Vidunda.

5.5.1 From verb to adverb to post verbal negator: The case of *hela*

The origin of *hela* is most likely the Proto Bantu reconstruction **-péd-*, a verb meaning ‘end (intr.), get lost’ (Bastin et al., 2002). In some Southern Bantu languages such as Xhosa and Zulu, there is a verb *-phela* ‘end’, from which an adverb or focus particle *kuphela*, with the meaning ‘only’, has been derived:

- Zulu S42* (Carstens et al., 2016):
- (134). U-John u-ya-sebenz-a kuphela.
 AUG-1a.John SM1-DJ-work-FV only
 ‘John only works’.

Similarly, *fela* means ‘only’ or ‘on its own’ in Northern Sotho (S32) (Zerbian, 2006, p. 373), whereas phonological processes are said to have caused Proto-Bantu **p* to get the reflex /h/ and *d** has become /l/ in languages a bit further north, such as Tsonga (S53). According to Janson (1992, p. 74) Tsonga has the verb *hela* ‘to finish’ as a reflex of **-péda*. In Ndamba, Pogolo, and

Vidunda, there is no attestation of a verbal use, but at least in Ndamba and Pogolo, *hela/hera* is used in the adverbial sense ‘only, alone, just’, as shown in examples below:

Ndamba (Novotná, 2005, p. 392):

- (135). Nenga **hela**
 PRO1SG **only**
 ‘I alone’

Pogolo (Hendle, 1907, p. 27):

- (136). nene kweke **hera**
 PRO1SG by.myself **alone**
 ‘I alone’

The adverbial meanings ‘alone, just, only’ are also attested for reflexes of **-tópó*, for example with *tu* in Swahili, which also occurs in Kutu, Kwere, and Zalamo:

Swahili (Hurskainen, 2016):

- (137). A-li-chek-a **tu**
 SM1-PST-laugh-FV **only**
 ‘S/he just laughed’

Kwere:

- (138). aka, si-wa-one mbé, n-i-wa-hulik-a **tu**
 INTRJ NEG.SM1SG-OM2-see-PST NEG.EMPH SM1SG-PST-OM2-hear-FV **only**
 ‘No, I didn’t see them, I only heard them’

While ‘just/only’ does not seem to be the adverbial sense prototypically encoded by *bule*, the semantic affinity between the concepts of ‘for free, in vain, for nothing’ is still evident in certain cases. In example (139) from Zalamo, repeated from (70), the consultant explained the meaning by providing the Swahili translation *usile tu* ‘Don’t just eat’. When asked about the meaning of *bule* in this context he explained that it means ‘for free’ and that the person must work for their food “they shouldn’t just eat for free’. Similarly, example (140) from Kutu was back-translated into the Swahili sentence *Analalamika tu* ‘S/he is just lamenting’, followed by the explanation that “s/he is just complaining for the sake of complaining”

Zalamo:

- (139). Sambu-u-j-e **bule**
 PROH-SM2SG-eat-SBJV **for.free/just**
 ‘Don’t just eat! (you need to work for it)’

Kutu:

- (140). K-o-iyalal-a **bule**
 SM1SG-NON.PST-lament-FV **just/for.no.reason**
 ‘S/he is just lamenting’ (for no good reason)

Further crosslinguistic evidence corroborates the close semantic relationship between these adverbial senses, as *hela/hera* also have the adverbial functions ‘in vain, for nothing, useless, voluntarily’ in Ndamba, Pogolo, and Vidunda:

Pogolo (Hendle, 1907, p. 167):

- (141). -tok-a **hera**
 work.hard-FV **in.vain**
 ‘Work hard in vain/for nothing’

Vidunda (Legère & Mkwana’hembo, 2019, p. 35):

- (142). Yojenda **hela** siyo mkala **hela** hanji kolokota.³²
 ‘He who walks **in vain** does not stay **useless**, he usually picks up’ (proverb)

Similarly, to *bule* in Kutu, Kwere, and Zalamo, both *hela* and *duhu* have both also developed into postverbal negative markers in Ndamba, supporting the development of *bule* from adverb to negative particle as an areal feature. In Ndamba, however, *hela* and *duhu* function as the sole negator of the sentence, shown in (143) and (144). In alignment with the theories of Jespersen’s cycles, it could well be that *hela* started out as a negative emphasiser before the emphatic force started to fade. Nevertheless, it seems like the development of negation in Ndamba, as opposed to Kutu, Kwere, and Zalamo, has proceeded in Jespersen’s Cyclical fashion and caused verbal negation prefixes to disappear.

Ndamba (Novotná, 2005, p. 124)

- (143). N-gu-v-a ngali **hela** ku-teleka
 SM1SG-PROG-be-FV still NEG INF-cook
 ‘I have not cooked yet’

Ndamba (Edelsten & Lijongwa, 2010, p. 111):

- (144). Ndembo ka-yend-a **duhu**
 9.elephant SM1.PRF-go-FV NEG
 ‘The elephant has not gone’

The relationship between the adverbial senses and negative particles can also be illustrated through the use of *tu* ‘only’ in Swahili. In certain contexts, it can have a very similar pragmatic function to a negative emphasiser. In the example below, it is interpreted as marking that the negative statement of ‘I am not going’, is not up for debate, i.e., “end of discussion”.

Swahili (Mohammed Zahran, p.c. 2023):

- (145). Hapana! Mimi si-end-i **tu!**
 INTRJ PRO1SG NEG.SM1SG-go-NEG.PRS **just**
 ‘No! I am *not* going (and that is that)’

³² No glossing provided, and any glossing of my own would be too tentative.

As a third and final item, besides *hela* and reflexes of **-tópó*, that proves the close relationship between the adverb ‘only’ and negative emphasisers, is the case of *bai* ‘only’ in Ndengeleko, illustrated in example (146). Surely *bai* must be a cognate to the post verbal negative marker *bae/mbai/mbé* discussed for Zalamo, Dawida, and Kwere/Luguru respectively in 5.3.

Ndengeleko (Scott, 2017):

- (146). nee n-dy-á nsúsi **bai**
 I SM1SG-eat-FV 3.stew **only**
 ‘I only eat stew’

5.5.2 Cyclical change: *-hela* and *-duhu* in non-verbal predication

As mentioned in 5.4.1, *-hela/-hera* is found to negate possession in Ndamba, Pogolo, and Vidunda, while reflexes of **-tópó* are found in the same function in Kutu and Ndengeleko. Both items were argued to have had an identical development path to *bule*, where the item is combined with a copulative element to form a negative Comit-type possessive ‘be without’. The constructions are repeated below for reference:

Ndamba (Novotná, 2005, p. 141) (*Glossing adapted*)

- (147). N-a-**hela** punda
 SM1SG-COP-NEG.POSS 9.donkey
 ‘I don’t have a donkey’

Ndengeleko (Ström, 2013, p. 284) (*Glossing adapted*):

- (148). Twa-a-**topo**
 SM1PL-COP-NEG.POSS
 ‘We don’t have’

Interestingly, the exact same development that has happened in Kwere and Kami with *-bule* taking an expletive locative subject marker and forming a negative IPL construction, has also occurred with *-hela* in Ndamba (149) and *-topo* in Ndengeleko (150). According to Bernander et al., (2021) the same development has occurred also with *-hera* in Pogolo. Although I have not been able to verify this, it does not seem unlikely.

Ndamba (Novotná, 2005, p. 283)

- (149). Va-mbuyi v-a dahili va-pat-a sana sida kwa sababu
 SM2-forefather 2-AS ancient SM2-get-FV a.lot 9.problem for reason
 kw-a-**hela** filivi
 SM17_{EXPL}-COP-NEG.LOC 8.food
 ‘Ancient forefathers got big problems because there was no food’

Ndengeleko (Ström, 2013, p. 284)

- (150). n-tópó oomba ku-lwíi
 SM18_{EXPL}-NEG.LOC.COP 9/10.fish LOC17-11.river
 ‘There is no fish in the river’

Vidunda, on the other hand, has a similar situation to Zalamo and Kutu. Here, the newly acquired negative predicative element (in Vidunda *hela* and in Zalamo and Kwere *-bule*) has only made it to first predicative function in the cycle, i.e., possession, whereas the item used in locational predication is the presumably older one, *-duhu*:

Vidunda (Legère & Mkwana’hembo, 2019, p. 14)

- (151). Ku-duhu sili y-a wan’hu weli
 SM17_{EXPL}-NEG.LOC.COP 9.secret 9-AS 2.people 2.two
 ‘There is no secret between two people’ (proverb)

At the moment, it is unclear whether *-hela* in Ndamba has proceeded even further in the cycle and developed into an expression of negative plain locational predication. There is no available data on such constructions. Consequently, this is left for future research. Similarly, there is no data on negative plain locational predication in Ndengeleko. The situation in Pogolo also requires further research, but it is noteworthy that Bernander et al., (2021) find a negative IPL construction (‘existential’) with locative marking and *-hera*, while no such construction has been attested for plain locational predication. Instead, for PLP, Hendle (1907, p. 45), only lists a completely different construction, shown below:

Pogolo (Hendle 1907, p. 45):

- (152). nene palapa ndiri
 PRO1SG 16.LOC.COP NEG
 ‘I am not there’

In Vidunda however, there is evidence of *-duhu* having continued in the cycle and is used in PLP. The construction is analysed as conforming to the same pattern of the constructions with *-duhu* and *-bule* in negative plain locational predication in Kami, Kutu, Kwere, and Zalamo, i.e., a subject marker showing agreement with the figure phrase occurs before the originally expletive subject marker:

Vidunda (Legère & Mkwana’hembo, 2019, p. 74) (glossing added)

- (153). G-a katali, ga-ku-duhu.
 6-AS long.ago SM6-LOC17-NEG.LOC.COP
 ‘The old is not here’ (proverb)

Besides confirming the functional overlap of these items as an areal feature, the comparative data also supports the direction of change going from negative IPL to negative PLP. The entailment that if *-bule*, *-duhu*, or *-hela*, is used in PLP, it also occurs in IPL holds for Kami,

Kutu, Kwere, Vidunda, and Zalamo. On the contrary, in Pogolo, *hera* is only found in IPL and not PLP, while Ndengeleko and Ndamba remain unclear.

As a final note, it is likely that the verb *-swela* ‘to lack’ in Kwere is a cognate to *hela*. In Kwere, *-swela* is distinctly more verbal than *-hela* in any of the languages where it is found as a negative possessive predicator. The verbal uses are shown below:

Kwere:

- (154). a) Ni-za-**swel**-a hela dyelo ichigulugulu
 SM1SG-FUT-**lack**-FV 9.money 9.today 7.evening
 ‘I won’t have any money this evening’ (lit. ‘I will lack money today evening’)
- b) Ku-**swel**-a hwilo kwiha
 INF-**lack**-FV faith bad
 ‘To be without faith is bad’
- c) yoyose seke-ya-**swel**-e hishima
 PRON PROH-SM1-**lack**-SBJV 9.respect
 ‘Nobody should lack respect’

If *-swela* in fact comes from the same source item, it would be interesting to investigate the semantic shift of this verb. It could be a direct derivation from the Proto-Bantu source verb that has seen a shift from ‘end’ to ‘lack’, possibly influenced by the use of *hela* for negative possession in languages spoken nearby. Alternatively *-swela* could previously have undergone a similar cyclical change in Kwere. In other words, starting out as an adverb and then developing into a negative possessive predicator. Recall from section 5.4.1 that *-bule* in Zalamo exhibit some more verb-like features; perhaps, rather than going in the direction of the proposed cycle and starting to occur in locational predication, an alternative pathway could be the development into a verb expressing negative possession, i.e., ‘lack’. This is of course a highly speculative development that will be left for future research.

To conclude chapter 5.5, it is interesting to note that the comparative data identifies two items, *hela/hera* and *duhu/topo*, with a high degree of polyfunctionality encoding all the adverbial, negative, and negative predicative functions also expressed by *bule*. Not only does this polyfunctionality constitute a fascinating areal feature, but it also seems to constitute a typological rarity. While negative lexical words are common source items for ‘negative existentials’, only **-tópó* has a meaning ‘empty’, that is found in Veselinova’s (2013) extensive sample. The meaning ‘empty’ is only listed for 1 out of 95 languages included in her sample (2013, p. 119). There is no mention of meanings like ‘only, in vain, for free, for no reason’, which seem to be rather Bantu specific (cf. Bernander et al., 2021).

5.6 Summary of results

Chapter 5 comprises all the main findings of the thesis. The first research question “*What are the forms and functions of *bule* in Kutu, Kwere, and Zalamo?*” is answered throughout the chapter in the chronological order in which they are thought to have developed. First, the uninflected uses, (i) adverb, (ii) post verbal negative emphasiser, and (iii) negative interjection are discussed in 5.2 and 5.3, with the following results:

- (i) The adverbial uses ‘in vain, for nothing, for free’ are attested in all languages
- (ii) The negative emphatic use is attested in Kutu and Kwere, while its occurrence in Zalamo seems to have disappeared. Furthermore, the emphatic connotations are somewhat bleached in Kutu, but still strong in Kwere.
- (iii) *bule* (uninflected) is used as an interjection ‘no’ in Kutu and Zalamo

The inflected forms of *-bule* and their functions as negative possessive and locational predicators are discussed in 5.4. All three languages make use of *-bule* in negative possessive predication and in Kwere, *-bule* is also used in negative locational predication. All functions of *bule* are compiled in Table 6 below:

FUNCTION	KUTU	KWERE	ZALAMO
Adverb ‘free /in vain’	YES	YES	YES
Bule as emphatic negative particle	YES	YES	NO (?)
Bule as an interjection ‘no’	YES	YES*	YES
Bule in negative predicative possession	YES	YES	YES
Bule in negative inversed locational predication	NO	YES	NO
Bule in negative plain locational predication	NO	YES	NO

Table 6: Functions of *bule* in Kutu, Kwere and Zalamo

*Although infrequent and only with locative marking

Furthermore, sections 5.2-5.4 also identify the other items and constructions used to encode all these functions, thus answering research question 2) “*In case of variation, what other items are used to express the same functions?*”. The results are summarized in Table 7 below:

FUNCTION	KUTU	KWERE	ZALAMO
Post verbal negative emphasiser	bule ng’o	mbé bule	kabisa bule* bae*
Negated predicative possession	-bule -duhu NEG+kuwa na	-bule NEG + -kala na NEG + -kuwa na -swela	-bule NEG + -kala na
Negative inversed locational predication	-duhu	-bule NEG + -kuwa na NEG + -kala na NEG + -kala	-duhu NEG + -kala na
Negative plain locational predication	-duhu NEG + -li NEG + -kala	-bule NEG + -li NEG + -kala NEG + -kuwa	-duhu NEG + -li
Interjection ‘no’³³	bule aka	aka habule	bule

Table 7: Items/constructions used to express functions of *bule* in Kutu, Kwere, and Zalamo

* *Most likely lost (cf. section 5.3)*

Research question 3) “*How can the development of *bule* and its diverse functions be mapped?*”, is answered throughout the chapter. Section 5.1 deals with the etymology and the introduction of *bule* into Kutu, Kwere, and Zalamo from Arabic via Swahili. Thereafter, the developments of various grammatical functions are accounted for in sections 5.2-5.4. The pathways are hypothesised as follows:

- (i) *adverb > negative emphasiser > negative interjection*
- (ii) *adverb > negative possessive predication > negative inversed locational predication > negative plain locational predication*
- (iii) *negative inversed locational predication > negative interjection*

In section 5.4, it is suggested that the development path in (ii) is part of a cyclical change pattern in which a new item, such as *-bule*, may be introduced and then follow a similar or identical grammaticalization path as a previous item, such as *-duhu*. Section 5.5 corroborates this cycle

³³ In all three languages, interjections such as ‘ah ah’, ‘mmh’, and ‘tssk’ (kissing of the teeth) are frequently used as well.

by analysing data from neighbouring languages and showing a similar development of the item *-hela* in Ndamba, Pogolo, and Vidunda.

The fourth and final research question “*How does *bule* fit into the typology of similar linguistic items, cross linguistically and in Bantu languages?*”, is answered mainly in sections 5.3-5.5. In relation to the Jespersen cycles, it is shown in 5.3, that neither *bule* nor any other post verbal negative emphasisers have become part of standard negation in Kutu, Kwere, and Zalamo. Rather, when the emphatic connotations are bleached over time, the particles are starting to become replaced by new items. In terms of Croft’s (1991) negative existential cycle, the constructions listed in section 5.4.2 and Table 7 show that at least Kwere and Zalamo can be classified as languages of type A~B. In other words, they can express negative inversed locational predication using either a dedicated IPL predicator, or by negating an affirmative construction using standard negation. In Kutu, only the dedicated IPL construction was attested.

In 5.4.1, *bule* is argued to be a negative Comit-Type possessive expressing ‘be without’ in Creissels’ (2022) typology. In Zalamo, there are some constructions in which it could also be analysed as negative Have-Type possessive, i.e., ‘not have’. In the negative locational predicative uses, section 5.4.2 shows that *bule* is typologically categorizable as a *be_with-IPL* construction (cf. Creissels, 2019), or in alternative terminology a Comit-type negative existential (cf. Bernander et al., 2021).

In 5.5.1, it is argued that a single item encoding all the adverbial, negative and negative predicative functions of *bule* is an areal feature.

6 Summary and future research

This Master’s thesis investigates and describes the forms, functions, and developments of the originally adverbial element *bule* in the East Ruvu languages Kutu, Kwere, and Zalamo.

Chapter 1 introduces the topic, the research aim, and the research questions.

Chapter 2 provides a background of the languages under study with information about genealogical classification, geographical distribution, number of speakers, vitality, and their limited descriptive statuses.

Chapter 3 is divided into three main parts: 3.1 Negation; 3.2 Possessive and locational predication and its negation; and 3.3 Diachrony of negation. In these sections, the key theoretical concepts relevant to the thesis are presented and discussed. The concepts are

discussed in a typological perspective with focus on Bantu languages. Several functions and constructions are exemplified with data from the languages under study, using my own field data. Section 3.1 defines negation as a functional category and discusses standard and non-standard negation, as well as negation marking from a typological perspective. Section 3.2 defines the predicative functions of possession and location, largely based on the works of Creissels (2019, 2022). It draws from earlier prominent works on the semantic interrelatedness between possession and location and establishes this as salient feature in the languages under study. This salient semantic feature is considered important for the development of *bule* and similar items. Moreover it discusses common negation strategies for these predicative functions, drawing from the existing works on so called ‘negative existentials’ (cf. Bernander et al., 2021; Veselinova, 2013, 2014, 2015). Section 3.3 discusses the development of negation marking and presents two well-attested theories of cyclical change, the Negative Existential Cycle by Croft (1991) and the Jespersen Cycle(s) named after the work of Jespersen (1917).

Chapter 4 outlines the methodology. The primary method for data collection was through the means of elicitation. Chapter 4 motivates this method and discusses different techniques and complimentary methods that were found useful when collecting the data.

Chapter 5 contains all the main findings of the thesis. A rich amount of data and examples are provided when accounting for the forms, functions, and developments of *bule*. It is shown that *bule* is a highly polyfunctional item. It can occur as a free-standing element in the following functions: adverb, post-verbal negative emphasizer, and negative interjection/answer particle ‘no’. It can also occur with a copulative element and take inflectional morphology, in doing so the functions encoded by *bule* include negative possessive predication, negative inversed locational predication, negative plain locational predication, and negative interjection/answer particle ‘no’. Furthermore, the functional expansion of *bule* is analysed diachronically through patterns of microvariation based both on data from the languages under study and from neighbouring languages. Based on comparative synchronic data and the limited amount of diachronic data available, two main parallel pathways of the functional expansion are proposed:

- (i) *adverb* > *negative emphasiser* > *negative interjection*
- (ii) *adverb* > *negative possessive predication* > *negative inversed locational predication* > *negative plain locational predication*

The possibility of encoding this multitude of functions with one and the same item, is identified as an areal feature since two nearly identical polyfunctional items, *duhu/topɔ* and *hela/hera* are

found in the languages under study and/or in some languages spoken nearby. It is argued that the distribution and morphosyntactic properties of *bule* and these other two items show that the suggested development path is cyclical in nature. In other words, a specific item, such as *bule*, is incorporated onto a grammaticalization path that follows an identical conceptual pattern, previously undergone by an earlier item with a similar source meaning, such as *-duhu*. The subsections of chapter 5, present the forms and functions of *bule* in an order that roughly corresponds to the hypothesised chronological development. Section 5.6 finally summarizes the findings in some detail.

There are many interesting areas for future research that can depart from the present work. It would be interesting to fill in the data gaps of the proposed cyclical change in Ndamba, Ndengeleko, Pogolo, and Vidunda. In the case of Pogolo it would also be highly relevant to add more recent data as the only available data is quite old. It would also be interesting to expand the data set and investigate the proposed cyclical change and the semantic overlap identified for *bule*, **-tópó*, and *hela/hera*, in more languages. In the immediate vicinity, other un(der) described languages include for example Sagala, Mbunga, Nguu, and Zigua. Furthermore, this sample could expand to see how the hypothesis holds for other Bantu languages. Bernander et al., (2021, p. 18) identify a number of Bantu languages, spread across the Bantu speaking area, that alternate between inherently negative items in negative IPL constructions. Since there is rarely any explanation provided for this variation, it would be interesting to see if it could be explained through the cyclical change pattern proposed in this thesis. One language that Bernander et al., (2021, p. 18) mention with such variation is Bena, a southern Tanzanian language that make use of both LOC-*gaya* ‘lack’ and LOC-*zila* ‘refuse’ as IPLs. The first mentioned item is also used to negated possession. Other identified languages with such variation are Mozambican Ngoni, Bende in Tanzania, Luba in DRC and Lusoga in Uganda.

More data from languages in the adjacent areas could possibly also provide valuable insights into the development of other features. For example, negative particles becoming the sole standard negation strategy in several of the languages spoken in southern Tanzania, whereas the East Ruvu languages maintain verbal negation markers and seem to use different negative particles as emphasisers until they are finally bleached, dropped, and replaced.

Finally, future research would benefit from using alternative methodological approaches, ideally collecting more naturalistic and dialogue data on Kutu, Kwere, and Zalamo, as well as their neighbouring languages.

References

- Appel, R., & Muysken, P. (1987). *Language Contact and Bilingualism*. E. Arnold.
- Ashton. (1947). *Swahili grammar (including intonation)* (2. ed.). Longmans, Green & Co.
- Auwers, J. van der, Lejeune, L., & Goussev, V. (2013). The Prohibitive. In M. S. Dryer & M. Haspelmath (Eds.), *The World Atlas of Language Structures Online*. Max Planck Institute for Evolutionary Anthropology. <https://wals.info/chapter/71>
- Bar-el, L., & Petzell, M. (2021). (Im)perfectivity and actionality in East Ruvu Bantu. *Sprachtypologie Und Universalienforschung : STUF*, 74(3), 533–559. <https://doi.org/10.1515/stuf-2021-1044>
- Bastin, Y., Coupez, A., & Mumba, E. (2002). *Bantu Lexical Reconstructions 3 / Reconstructions lexicales bantoues 3* [Data set]. Royal Museum for Central Africa. https://www.africamuseum.be/en/research/discover/human_sciences/culture_society/blr
- Bernander, R. (2017). *Grammar and grammaticalization in Manda: An analysis of the wider TAM domain in a Tanzanian Bantu language*. Göteborgs universitet.
- Bernander, R., Bloom-Ström, E.-M., & Gibson, H. (2022). Post-verbal negative particles in Southern Tanzania: Form, distribution and historical development. *Africana Linguistica*, 28(2022), Article 2022.
- Bernander, R., Devos, M., & Gibson, H. (2020). Existential constructions in Bantu languages. In E.-M. Bloom Ström, H. Gibson, R. Guérois, & L. Marten (Eds.), *Current approaches to morphosyntactic variation in Bantu*. Oxford University Press.
- Bernander, R., Gibson, H., & Devos, M. (2021). *The negative existential cycle in Bantu*.

- Bloom Ström, E.-M., & Petzell, M. (to appear). Micro-variation approaches to Bantu language varieties. In L. Marten, N. C. Kula, J. Zeller, & E. Hurst (Eds.), *The Oxford Guide to the Bantu Languages*. Oxford University Press.
- Bowern, C. (2015). *Linguistic Fieldwork: A Practical Guide* (2nd edition). Palgrave Macmillan. <https://doi.org/10.1057/9781137340801>
- Carstens, V., Zeller, J., & Mletshe, L. (2016, June 20). *Adverbial kuphela ('only') in Xhosa and Zulu*. Bantu 6, Helsinki.
- Catalogue of Endangered Languages. (2023). Zaramo. In *Endangered Languages Project*. University of Hawaii at Manoa. <https://endangeredlanguages.com/lang/3145>
- Chappell, H., & Creissels, D. (2019). Topicality and the typology of predicative possession. *Linguistic Typology*, 23(3), 467–532. <https://doi.org/10.1515/lingty-2019-0016>
- Christie, J. J. (1970). Locative, Possessive and Existential in Swahili. *Foundations of Language*, 6(2), 166–177.
- Clark, E. V. (1978). Locationals: Existential, locative, and possessive constructions. In *Universals of Human Language, Vol. 4: Syntax: Vol. 4: Syntax* (pp. 85–126). Stanford University Press.
- Comrie, B., Haspelmath, M., & Bickel, B. (2015). *The Leipzig Glossing Rules: Conventions for interlinear morpheme-by-morpheme glosses*. Department of Linguistics of the Max Planck Institute for Evolutionary Anthropology & the Department of Linguistics, University of Leipzig.
- Cordell, O. T. (1941). *Gogo grammar* (p. 117). Self Published.
- Cover, R. T. (2015). Semantic Fieldwork on TAM. In *Methodologies in Semantic Fieldwork*. Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780190212339.003.0010>

- Creissels, D. (2013). Control and the evolution of possessive and existential constructions. In E. van Gelderen, J. Barðdal, & M. Cennamo (Eds.), *Studies in Language Companion Series* (pp. 461–476). John Benjamins Publishing Company. <https://doi.org/10.1075/slcs.131.17cre>
- Creissels, D. (2019). Inverse-locational predication in typological perspective. *Italian Journal of Linguistics*, 31(2), 37–106.
- Creissels, D. (2022). *Predicative possession in Bantu languages [submitted to Morphosyntactic Variation in Bantu]*. 27.
- Croft, W. (1991). The evolution of negation. *Journal of Linguistics*, 27(1), 1–27.
<https://doi.org/10.1017/S0022226700012391>
- Dahl, Ö. (1979). *Typology of sentence negation*. 17(1–2), 79–106.
<https://doi.org/10.1515/ling.1979.17.1-2.79>
- Dahl, Ö. (2010). Typology of negation. In *Typology of negation* (pp. 9–38). De Gruyter Mouton.
<https://doi.org/10.1515/9783110219302.9>
- Devos, M., & van der Auwera, J. (2013). Jespersen cycles in Bantu: Double and triple negation. *Journal of African Languages and Linguistics*, 34(2), 205–274. <https://doi.org/10.1515/jall-2013-0008>
- Dimmendaal, G. J. (2011). *Historical Linguistics and the Comparative Study of African Languages*. Amsterdam: John Benjamins Publishing Company. <https://doi.org/10.1075/z.161>
- Dryer, M. S. (2013). Negative Morphemes. In M. S. Dryer & M. Haspelmath (Eds.), *The World Atlas of Language Structures Online*. Zenodo. <https://doi.org/10.5281/zenodo.7385533>
- Dunham, M. (2005). *Eléments de Description Du Langi: Langue Bantu F 33 de Tanzanie : Phonologie, Grammaire, Lexique*. Peeters.

- Eberhard, D. M., Simons, G. F., & Fennig, C. D. (Eds.). (2022). *Ethnologue: Languages of the World* (25th ed.). SIL International. <http://www.ethnologue.com>
- Eckardt, R. (2006). *Meaning Change in Grammaticalization*. Oxford University Press.
<https://doi.org/10.1093/acprof:oso/9780199262601.001.0001>
- Edelsten, P., & Lijongwa, C. (2010). *A grammatical sketch of Chindamba: A Bantu language (G52) of Tanzania*. Köppe.
- Francez, I. (2010). Context dependence and implicit arguments in existentials. *Linguistics and Philosophy*, 33(1), 11–30. <https://doi.org/10.1007/s10988-010-9073-2>
- Freeze, R. (1992). Existentials and Other Locatives. *Language (Baltimore)*, 68(3), 553–595.
<https://doi.org/10.2307/415794>
- Givón, T. (2018). *On Understanding Grammar: Revised Edition*. John Benjamins Publishing Company.
- Gonzales, R. M. (2002). *Continuity and change: Thought, belief, and practice in the history of the Ruvu peoples of central east Tanzania, c. 200 B.C. to A.D. 1800* [ProQuest Dissertations Publishing]. <https://search.proquest.com/docview/304778753?pq-origsite=primo>
- Güldemann, T. (1999). *The genesis of verbal negation in Bantu and its dependency on functional features of clause types*. (pp. 545–587).
- Hammarström, H. (2019). An inventory of Bantu Languages. In *The Bantu Languages* (2nd ed., pp. 17–78). Routledge. <https://doi.org/10.4324/9781315755946>
- Hammarström, H., Forkel, R., Haspelmath, M., & Bank, S. (2022). *Glottolog 4.7*.
<https://doi.org/10.5281/zenodo.7398962>
- Haspelmath, M. (2001). *Indefinite Pronouns*. Oxford University Press.

Haugen, E. (1950). The Analysis of Linguistic Borrowing. *Language*, 26(2), 210.

<https://doi.org/10.2307/410058>

Heine, B. (1997). *Possession: Cognitive sources, forces, and grammaticalization*. Univ. Press.

Heine, B., Claudi, U., & Hünnemeyer, F. (1991). *Grammaticalization: A Conceptual Framework*.

Bibliovault OAI Repository, the University of Chicago Press.

Heine, B., & Kuteva, T. (2002). *World Lexicon of grammaticalization*.

Heine, B., & Reh, M. (1984). *Grammaticalization and Reanalysis in African Languages*. H. Buske.

Hendle, P. J. (2019). Die Sprache der Wapogoro (Deutsch-Ostafrika): Nebst einem deutsch-chipogoro und chipogoro-deutschen Wörterbuche. In *Die Sprache der Wapogoro (Deutsch-Ostafrika)*. De Gruyter Mouton. <https://doi.org/10.1515/9783111677903>

Hengeveld, K. (2011). Non-Verbal Predication: Theory, Typology, Diachrony. In *Non-Verbal Predication*. De Gruyter Mouton. <https://doi.org/10.1515/9783110883282>

Hinnebusch, T. J. (1981). Northeast Coastal Bantu. In *Studies in the classification of eastern Bantu languages* (pp. 21–125). Helmut Buske Vlg.

Horn, L. (1984). *Toward a new taxonomy for pragmatic inference: Q-based and R-based implicature*.

Hurskainen, A. (2016). *Helsinki Corpus of Swahili 2.0 Annotated Version* [Text corpus].

Kielipankki. <http://urn.fi/urn:nbn:fi:lb-2016011301>

Janson, T. (1992). *Southern Bantu and Makua*. <https://www.semanticscholar.org/paper/Southern-Bantu-and-Makua-Janson/3041d5c2e2ee940854878f2cd992e81c649126db>

Jespersen, O. (1917). *Negation in English and other languages*. København, A. F. Høst.

<http://archive.org/details/cu31924026632947>

- Johnson, F. (1939). *A standard Swahili-English dictionary: (Founded on Madan's Swahili-English dictionary)*. Oxford University Press.
- Johnston, H. H. (1919). *A comparative study of the Bantu and semi-Bantu languages*. Oxford, Clarendon Press. <http://archive.org/details/comparativestudy01johnuoft>
- Kamba Muzenga, J. G. (1981). *Les formes verbales négatives dans les langues bantoues* (Vol. 106). Koninklijk Museum voor Midden-Afrika.
- Koch, P. (1999). Cognitive aspects of semantic change and polysemy: The semantic space have/be'. In A. Blank & P. Koch (Eds.), *Historical semantics and cognition*. Mouton de Gruyter.
- Koch, P. (2012). Location, existence, and possession: A constructional-typological exploration: New Directions in Lexical Typology. *Linguistics*, 50(3), 533–603.
- Krasnoukhova, O., & van der Auwera, J. (2020). The Typology of Negation. In *The Oxford Handbook of Negation*. Oxford University Press.
<https://doi.org/10.1093/oxfordhb/9780198830528.013.3>
- Languages of Tanzania Project (LoT). (2009). *Atlasi ya lugha za Tanzania*. Chuo Kikuu cha Dar es Salaam.
- Larrivé, P. (2020). The Role of Pragmatics in Negation Change. In V. Déprez & M. T. Espinal (Eds.), *The Oxford Handbook of Negation* (p. 0). Oxford University Press.
<https://doi.org/10.1093/oxfordhb/9780198830528.013.32>
- Legère, K. (2006). Language endangerment in Tanzania: Identifying and maintaining endangered languages. *South African Journal of African Languages*, 26(3), 99–112.
<https://doi.org/10.1080/02572117.2006.10587273>
- Legère, K. (2010). 'Vidunda/Ngh'wele sentences'. Unpublished field notes.

- Legère, K. (2021). *Trilingual Ng'hwele-Swahili-English and Swahili-Ng'hwele-English wordlist*. Göteborgs universitet Göteborg. <https://hdl.handle.net/2077/67504>
- Lodhi, A. Y. (2000). *Oriental influences in Swahili a study in language and culture contacts*. Univ. <http://hdl.handle.net/2077/12757>
- Lyons, J. (1967). A Note on Possessive, Existential and Locative Sentences. *Foundations of Language*, 3(4), 390–396.
- Marten, L. (2013). Structure and interpretation in Swahili existential constructions. *Italian Journal of Linguistics*, 25(1), 45–73.
- Matthewson, L. (2004). On the Methodology of Semantic Fieldwork. *International Journal of American Linguistics*, 70(4), 369–415. <https://doi.org/10.1086/429207>
- Meeussen, A. E. (1967). Bantu grammatical reconstructions. *Africana Linguistica*, 3(1), 79–121. <https://doi.org/10.3406/aflin.1967.873>
- Meillet, A. (1926). L' évolution des formes grammaticales. *Linguistique Historique et Linguistique Générale*, 130–148.
- Meinhof, C. (1907). Linguistische Studien in Ostafrika XII: Dzalamo. *Mittheilungen Des Seminars Für Orientalische Sprachen*, X(3), 90–110.
- Miestamo. (2017). Negation. In A. Y. Aikhenvald & R. M. W. Dixon (Eds.), *The Cambridge Handbook of Linguistic Typology* (pp. 405–439). Cambridge University Press. <https://doi.org/10.1017/9781316135716>
- Miestamo, M. (2005). *Standard Negation: The Negation of Declarative Verbal Main Clauses in a Typological Perspective* (1. Aufl., Vol. 31). Mouton de Gruyter.

- Mkude, D. J. (1974). *A study of kiluguru syntax with special reference to the transformational history of sentences with permuted subject and object* [ProQuest Dissertations Publishing].
<https://search.proquest.com/docview/1789823184?pq-origsite=primo>
- Möller, M. (2011). *The noun phrase in Kwere, a Bantu language of Tanzania*.
<http://hdl.handle.net/2077/25895>
- Morrison, M. E. (2011). *A Reference Grammar of Bena* [ProQuest Dissertations Publishing].
<https://search.proquest.com/docview/894767455?pq-origsite=primo>
- Mosel, U. (2011). Morphosyntactic Analysis in the Field: A Guide to the Guides. In *The Oxford Handbook of Linguistic Fieldwork*. Oxford University Press.
<https://doi.org/10.1093/oxfordhb/9780199571888.013.0004>
- Mpiranya, F. (2015). *Swahili grammar and workbook*. Routledge.
- Novotná, J. (2005). *A grammar of Ndamba* [Doctoral dissertation]. Memorial University of Newfoundland.
- Nurse, D. (1970). *A phonological and morphological sketch of 15 of the principal languages of Tanzania*. Inst. of Kiswahili Research (IKR/TUKI), Univ. of Dar es Salaam.
- Nurse, D. (2008). *Tense and aspect in Bantu*. Oxford University Press.
- Nurse, D., & Philippson, G. (1980). The Bantu Languages of East Africa: A Lexicostatistical Survey. In *Language in Tanzania* (pp. 26–67). Oxford: Oxford University Press.
- Nurse, D., & Philippson, G. (2003). Towards a historical classification of the Bantu languages. In D. Nurse & G. Philippson (Eds.), *The Bantu languages* (pp. 164–181). Routledge.
- Payne, J. R. (1985). Negation. In T. Shopen (Ed.), *Language typology and syntactic description. Vol. 1, Complex constructions* (pp. 197–242). Univ. Press.

- Petzell, M. (2008). *The Kagulu language of Tanzania: Grammar, texts and vocabulary*. Köppe.
- Petzell, M. (2012). The linguistic situation in Tanzania. *Moderna Språk*, 106(1), 136-.
- Petzell, M., & Aunio, L. (2019). Kami G36. In *The Bantu Languages* (2nd ed., pp. 563–590). Routledge. <https://doi.org/10.4324/9781315755946-19>
- Petzell, M., & Hammarström, H. (2013). Grammatical and lexical comparison of the greater Ruvu Bantu languages. *Nordic Journal of African Studies*, 22(3), 129–157.
- Sacleux, C. (1939). *Dictionnaire français-swahili* (2. éd., rev. et augm). Institut d'ethnologie.
- Scott, T. (2017). *Ndengeleko Fieldwork Collection* [Data set]. California Language Archive, Survey of California and Other Indian Languages. <https://cla.berkeley.edu/>
- Stassen, L. (2009). *Predicative Possession*. Oxford University Press.
- Stassen, L. (2013). Predicative Possession (v2020.3). In M. S. Dryer & M. Haspelmath (Eds.), *The World Atlas of Language Structures Online*. Zenodo. <https://doi.org/10.5281/zenodo.7385533>
- Steere, E. (1869). *Short specimens of the vocabularies of three unpublished African languages; Gindo, Zaramo and Angazidja* (p. 38). Charles Cull.
- Ström, E.-M. (2013). *The Ndengeleko language of Tanzania* [Phd]. University of Gothenburg.
- The New Testament in Nguu. (2014). *Ndagano mp'ya kwa wanth'u wose The New Testament in the Nguu language of Tanzania*. Pioneer Bible Translators.
- The New Testament in Zigua. (2014). *Lagano hya The New Testament in the Zigua language of Tanzania*. Pioneer Bible Translators.
- TUKI. (2001). *Kamusi ya Kiswahili-Kiingereza Swahili-English dictionary* (Toleo la Kwanza). Chuo Kikuu Cha Dar es Salaam.

- van der Auwera, J. (2009). The Jespersen cycles. In E. van Gelderen (Ed.), *Cyclical Change*. John Benjamins Publishing Company. <https://doi.org/10.1075/la.146.05auw>
- van der Auwera, J. (2010). On the diachrony of negation. In *On the diachrony of negation* (pp. 73–110). De Gruyter Mouton. <https://doi.org/10.1515/9783110219302.73>
- Velupillai, V. (2012). *An introduction to linguistic typology*. John Benjamins Publishing Company. <http://ezproxy.ub.gu.se/login?url=http://www.GU.ebib.com/patron/FullRecord.aspx?p=988855>
- Veselinova, L. (2013). Negative existentials: A cross linguistic study. *Rivista Di Linguistica = Italian Journal of Linguistics*, 25(1), 107-.
- Veselinova, L. (2014). The negative existential cycle revisited. *Linguistics*, 52(6), 1327–1389. <https://doi.org/10.1515/ling-2014-0021>
- Veselinova, L. N. (2015). *Special Negators in the Uralic Languages: Synchrony, Diachrony and Interaction with Standard Negation* (pp. 547–600). John Benjamins Publishing Company. <https://urn.kb.se/resolve?urn=urn:nbn:se:su:diva-127559>
- Worms, A. (1897). Grundzüge der Grammatik des Ki-Zaramo in Deutsch-Ostafrika. *Zeitschrift Für Afrikanische Und Oceanische Sprachen*, III(4), 298–310.
- Wouden, T. van der. (1997). *Negative contexts: Collocation, polarity and multiple negation*. Routledge.
- Zahran, A. (2022, August 29). *The Reflexive-Reciprocal prefix in East Bantu*. 52nd Colloquium of African Languages and Linguistics: Contact in East Africa Workshop., Leiden University.